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LECTURES ON PHRENOLOGY,

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IN THE UNIVERSITY OF PARIS,

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LECTURE VIII.

7.—ALIMENTIVENESS.

GENTLEMEN:—On taking up the functions of the middle lobe of the brain, we arrive at the study of two organs, which, though their existence is highly probable, are not yet generally admitted by phrenologists. These organs are—alimentiveness and love of life.

Alimentiveness, a term first adopted by SPURZHEIM, means a choice of food; it determines the appetite; but, in the human subject, it is more particularly applied to delicacy of taste, to the choice of food; in other words, to what was once called "gluttony," but which is now dignified by the name of "gastronomy."

History.—COMBE was struck with the manner in which the olfactory nerve passes from the nose and nasal fossa, to terminate in the convolutions at the base of the middle lobe of the brain. He found it remarkably large, and observed that it became confounded with that part, particularly in the sheep, a fact which is equally seen in other herbivorous animals; hence he concluded that that part of the nervous system directed the choice of food. You can easily conceive that animals which feed in meadows, or on large tracts of land which are productive of great varieties of plants, have acquired a particular faculty to enable them to distinguish those plants which are wholesome from those which are injurious; and as this can only be done by the nervous system, we are necessarily compelled to admit a particular portion for this particular function. Now, as it is evident that the perception of the qualities of different plants is conveyed by the sense of smell, through the medium of an organ placed externally, close to the opening of the mouth, we are inclined to conclude that the faculty of distinguishing what is wholesome from that which is injurious, depends upon this perception. This is easily conceived, although it is beyond our philosophical reasoning, or the reflections of the pschycologists, who could never have discovered this phenomenon by reflecting on what passes within themselves; it is a simple fact of natural history, and nothing else. This organ is admitted by one phrenologist in England, Mr. CROOK, and by another phrenologist, at Copenhagen, who adopted the same mode of thinking from his own observations. The latter were communicated to SPURZHEIM, who admitted this organ, although he considered its existence to be doubtful. I mention this latter fact, because I wish to present to you a view of the actual state of the science, without blindly proposing to you to adopt either one opinion or another.

Situation.—This organ is placed in the zygomatic fossa, and is marked on the head above the anterior lobe of the ear; it is concealed under the temporal muscle, and augments the volume of the head in a sensible manner, below the organ of *constructiveness*, and in front of *destructiveness*. I have witnessed a most remarkable example in a woman whose case was observed by M. DESCURET. When at *La Salpetrière* she ate the allowance of from fifteen to eighteen persons a day. When turned out of the hospital she seized every possible occasion for stealing bread and other food. At last she was compelled to retire into the country without resource, and there devoured every species of veg table food which presented itself within her reach. But deprived of the faculty which herbivorous animals possess of distinguishing wholesome plants, she gorged injurious vegetable substances, and at last died from the effects of violent gastritis. M. DESCURET has preserved her skull, from which he has taken a cast. Here you may see the organ corresponding with the region already mentioned; it is placed, as you see, in front of *destructiveness*, and presents nearly double its natural volume.

Primitive Impulse.—M. VIMONT has made

several interesting remarks on this organ. When the new-born child seeks its mother's breast, it obeys, according to this writer, the impulse of *alimentiveness*. I have already told you that the infant is stimulated to this act by simple instinct. Here, then, I show you the organ of this instinct. The chicken picks up the grain which is most suitable to its nutrition. The young duck, obeying the instinct of *locality*, runs to the water, and finds there the drink and food which are most suitable to its support. Instigated by this organ, the infant continues to suck whenever the breast is offered to it, even after its hunger has been satisfied. Hence this organ is stimulated by an impulse besides that of hunger; and you know how gluttons, impelled by the attraction of some new dish, continue to eat with avidity after their appetite has been completely satisfied. The adult, placed under the active influence of this organ, is frequently unable to resist the temptation of substances which are calculated to excite its appetite. It is during the course of convalescence from disease, that the action of alimentiveness becomes predominant. In some cases it even produces a species of delirium, in case the appetite is not satisfied, or when deprived of some particular article of food on which the mind has been fixed. In these cases men are seized by an access of passion or vexation at not obtaining the desired object, which is quite inexplicable. This state, certainly, can only be the result of some powerful impulse, for which we can account in no other manner than by reference to the organ now under consideration. In all vertebrated animals, a portion of the brain is destined for this function; but the part does not always act under the impulse of the olfactory nerve alone. Thus, in man, alimentiveness is excited by other agents. I have sufficiently proved this by the case of the unfortunate woman just mentioned, who lost her life from devouring unwholesome plants. The sense of taste contributes something to the choice of food; but neither smell nor taste is sufficient to indicate with certainty what is wholesome or what is unwholesome. For this purpose man requires experience, and has thus the disadvantage of being less able to distinguish, in the external world, the substances which are most suitable for his support.

According to phrenologists, not only gluttony, but drunkenness, may result from excessive development of this organ. According to the same authors, it gives them the faculty of exquisite taste in the preparation of food, for they have remarked that gluttons and epicures have always this portion of the head, above the zygomatic arches, remarkably large. M. VIMONT thinks, that in persons who are excessively fond of smoking, that taste depends on the organ of which we now speak. It is right to tell you this, for no opinion should be omitted in a course like the present.

From what has been said, you see that this is one of the first organs which commences to act, and also is one of those which persists the longest; for it has always been remarked, that the love of good eating survives all other tastes and passions, to the most advanced period of our life. It has also been said that this organ is very predominant in chlorotic females, who exhibit depraved taste, by eating plaster, and other extraordinary substances, and in idiots, who indulge in the most disgusting species of food.

The following is M. VIMONT's opinion as to its seat in animals. He places it in the zygomatic fossa, below the organ of *acquisitiveness*, and in front of destruction, with which it is continuous, forming a part of the cerebral convolutions corresponding with the large ring of the sphenoid bone. It occupies the whole space included between a right line drawn from the [illegible] zygomatic process, along the [illegible] the sphenoid bone. It is [illegible] in the quadrumana, and is [illegible] mals, and we also find it [illegible] and it exists in all vora[illegible] continuation of the org[illegible] In birds we find it above [illegible] the external orbital [illegible] quotes the cormorant, the [illegible] goëlan, birds which are r[illegible] voracity, as presenting th[illegible] degree of development.

So much for the organ [illegible] We now pass to the consider[illegible] organ, which, though conside[illegible] by some, is admitted by a conside[illegible] ber of writers. The organ of which w[illegible] just treated appears to be established with certainty, for the most experienced phrenologists allow its existence, although you will not find it numbered on the cast. For my part I am induced to adopt it, partly from the observation already mentioned, and partly from some other experiments, which, though less positive, do lead me to conclude that it really exists.

8.—Love of Life.

The other organ is that of the love of life, which we might call *biophily*, or, the organ of preservation, which consists in an inclination to avoid danger when it presents itself, without the interference of the reflection. This is the primitive destination of the organ. I add, "without reflection," for all the organs appropriate to the instincts and the feelings, act, as I have already said, without reflection.

History, and primary impulse.—This organ was discovered by M. VIMONT. I speak of it from his work, for I confess that I have not examined all the annals of the English, the Danish, and the American phrenologists, to

ascertain if he really was the inventor or not. Neither GALL nor SPURZHEIM suspected the existence of this organ. According to the latter, love of life depends rather on timidity and fear. However, he was unable to decide whether it was really a negative quality, opposed to courage, destructiveness, and firmness, as GALL thought, or, whether it depended more particularly on circumspection, which he considered to be the organ of timidity. SPURZHEIM was himself satisfied with this explanation, and I have heard him account for the love of life in this manner. However, we are naturally inclined to think that a faculty which determines instantaneous movements of flight, retreat, &c., must possess some share of activity. M. VIMONT's opinion was made up upon this question, upon which he has bestowed a good deal of thought. The following is the result of his observations. The faculty manifests itself, at an early period, animals. According to this author it nes the cries of the child at the f birth, which is impelled by an ling to deprecate the pain and which the act of birth exposes inct is also expressed by the nimals when frightened; by which other species fly at the the least disturbance in the nosphere. It is evident that le to calculate consequences; some noise, they perceive dinary motion, some figure n does not denote to be an when they fly it must be by This is seen in a great number of domesticated animals, and even mother possesses a corresponding instinct; for she indicates the presence of an enemy by a peculiar cry, which is understood by the instinct of her offspring, who at once take refuge by gathering around her. Animals nestle under the wing of the hen; or, introduce themselves into the pouch of the kangaroo, for the latter animal gives birth to its young before the period of maturity. Those little beings, scarcely half-developed, quit their parents and enjoy themselves in the sun; but the instant an enemy approaches, the mother utters her cry, and the young ones take refuge without delay in the ready pouch, furnished with numerous nipples from which they extract the necessary nutriment. You cannot here avoid seeing a particular organization and provision of nature. The mother, impelled by a sense of danger, utters a cry, whose meaning is well understood by the organ of the *love of life*, which determines her offspring to avoid the threatened calamity. M. VIMONT has followed up these observations with considerable sagacity, and has ascertained facts which never would have been discovered, but by the phrenologists, or the supporters of the doctrine of common sense. We owe them solely the observation of nature.

Sudden actions of this kind must depend upon the possession of a faculty. It is impossible to attribute them to defect of any faculty, or, in other words, to negation. For, generally speaking, negation is incapable of producing any thing. Hence the effects to which we have alluded do not depend simply on caution or cunning. Cunning is a different thing. Circumspection is still further removed from this. The original observation of M. VIMONT did not enable him to localise this faculty. However, I shall quote from his work a fact which furnishes some data. He studied the habits of several rabbits which were living in community. He remarked one, which was alarmed at the slightest noise, killed it, and examined its brain. The inferior and internal portions of the middle lobe were found to be of twice the size of the same part in other rabbits with which he compared them.

I must now show you the organ according to the author of whom I speak. Here is *destructiveness*; here *appetite*, or *alimentiveness;* and below these you see a group which composes the base of the middle lobe. This portion appeared, as we said, more developed by one half in the timid rabbit than in any others. He, therefore, compared it with the brains of other animals preserved in alcohol, and discovered a similar conformation in all those which manifested the same tendency to fly rapidly from danger. This portion of the brain is very considerably developed in the monkey, the fox, the cat, the marten, the pole-cat, the marmot, the hare, and the weasle. These animals, as you all know, take to flight from the slightest cause imaginable. M. VIMONT made the same observation with respect to the stag and the fawn. In birds, this portion forms a rounded mass at the posterior and inferior region of each hemisphere, above the bigeminal tubercles which correspond with the quadrigeminal of man. He remarks, that this organ corresponds with the base of the cranium, below the cavity which receives these bigeminal tubercles. He also observed the organ in birds of prey, particularly night birds, which are approached with such difficulty. Hence the organ of the *love of life* may co-exist with that of *destructiveness*. In fact, animals may be voracious and cruel, and at the same time extremely wild, or disposed to fly when another object than its prey presents itself to view. It feels instinctively the approach of an enemy, and avoids it by flight. It might be alleged that the wildness of these birds depends on caution; but the action of caution is observed to unite with the operation of all the organs, and the acts dependent on caution vary according to the nature of the organ which is brought into play. M. VIMONT points out the existence

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So much for the organ of *alimentiveness*. We now pass to the consideration of another organ, which, though considered doubtful by some, is admitted by a considerable number of writers. The organ of which we have just treated appears to be established with certainty, for the most experienced phrenologists allow its existence, although you will not find it numbered on the cast. For my part I am induced to adopt it, partly from the observation already mentioned, and partly from some other experiments, which, though less positive, do lead me to conclude that it really exists,

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of this organ in wild geese, and in the diving birds, particularly cormorants. COMBE did not speak of this organ until he published the third edition of his book, and he was then led to admit its existence by observing the repugnance with which some individuals quit life. In fact, we observe some men who cannot make up their minds to die. Others there are, who resign themselves without difficulty; and others, again, who confront death voluntarily. There must be some reason for this difference. The social position of the individual, it is true, has great influence in determining this event. We all know that the rich and powerful quit life with regret, while the poor and unfortunate often throw it off without a thought, and even with joy. However, the organization of the brain always exercises its own influence, and often produces opposite effects. I have seen the most unhappy, the most miserable, of beings, clinging to life with tenacity, while the rich man, in the midst of every enjoyment which wealth could supply, renounced it without regret. It is in cases of this kind, apparently exceptional, that we may study with advantage the influence of organization. The most obvious influence of social dispositions is not sufficient to conceal the action of cerebral organization, and the observations which we have collected, establish a constant relation between the love of life and the development of the inferior and lateral portions of the skull, a little anteriorly.

Situation.—To avoid all error in the investigation of the organ which now occupies us, I request your attention to this skull. Observe the external auditory foramen, and the zygomatic fossa situated in front of it. It is in this portion of the skull, concealed under the osseous arch of the cheek, and which corresponds with the inferior part of the great wing of the sphenoid bone, and a small portion of the temporal bone, that you will find the projection of the organ of the love of life. If you now turn your attention to the brain, you will easily perceive that the organ is connected with a convolution running along the inner edge of the organ of *destructiveness*, and terminating, anteriorly, with the organ of *alimentation*. The two then correspond in common with the posterior wall of the zygomatic fossa, which they render more or less prominent. When co-existing in the same person, they produce a very considerable breadth in that portion of the head which corresponds with the posterior extremity of the malar bone. The zygomatic fossa, indeed, is filled up by the temporal muscles, but as the fibres of the muscles are pushed forwards by the two organs, and highly developed, it is very possible to distinguish them, as they enlarge the head between the ear and the malar bone. *Alimentiveness* is more marked in the upper portion of the space now indicated, and the *love of life* in the lower. Numerous observations have been made on suicides, and it has been remarked that persons who destroy themselves from slight reasons, present a great depression in that portion of the skull which corresponds with *the love of life*. DUMOUTIER has collected a great number of facts on this subject. He concludes that, in general, the organ is very slightly developed in those who destroy themselves. On the contrary, is is very common in individuals who think of nothing but their own preservation, and are selfish in the highest degree. Hypochondriacs are generally of this class. Here, then, as you see, are two organs, discovered since the time of GALL. As they have been observed but recently, many examples cannot be supplied. Suffice it to draw your attention to this point.

9.—SECRETIVENESS.

We have now to speak of the organ which GALL denominated "cunning," but which SPURZHEIM, who altered many of the terms of his preceptor, has called *secretiveness*. This organ, as I have said, was originally known under the name of "finesse," "cunning," &c., words which are extremely expressive. It was observed by GALL, and its existence has been confirmed by all phrenologists, without exception, since his time. It is, perhaps, one of the organs on which writers are most agreed.

Situation.—At the side of the head, immediately above the organ of destruction, which, as you know, runs horizontally, just above the ear. Here is one of the most remarkable examples of this organ, in the head of the Hungarian represented in GALL's work. *Destructiveness* is but slight, while *secretiveness* is enormous, and forms the whole projection of this region. Here is another example, a robber, on whose head you may make the same observation. The lateral portion of the head which I now point out, is a little above the organ of destruction, which separates it from the auditory foramen. It is elongated and horizontal, like *destructiveness*, because the organ depends on an elongated convolution, which lies in an horizontal direction. This organ, then, enlarges the head in the region pointed out, about half-an-inch above the ear.

Primary Influence.—It produces a tendency to concealment. SPURZHEIM, observing that the word "cunning" was always received in a bad sense, was authorised in changing it for another. According to this latter phrenologist, its primary action is a tendency to concealment, to draw aside, for the purpose of observing others, of dissembling, of suspending the manifestation of the thoughts and real sentiments, for the purpose of executing a project with greater certainty. Hence this organ must be con-

sidered as one which serves to controul other organs, and in this respect seems analogous to circumspection, or *caution*. However, we should distinguish it from the latter, for it seems rather destined to aid the instinct than the intelligence. The most experienced phrenologists agree in thinking that *secretiveness* suggests an underhand way of overcoming difficulties, much more than a tendency to perfect the reasoning power, and arrive at truth. This organ produces cunning rather than prudence, for we often see culprits exhibit extraordinary cunning in their defence, although they evidently want prudence, and possess but slight logical powers. This organ destroys all frankness, and stops the disclosure of our opinions, producing dissimulation.

How do the philosophers explain the faculty of which we treat? They considered cunning, finesse, dissimulation, as qualities of the soul; these words signify but little, for we are all compelled to ask how and wherefore the soul possesses these qualities, whether they are derived from chance, from education, or from primitive constitution. Finally, we ask, what notion can be formed of what those gentlemen call the constitution of the soul, or what proof they give of its existence?

Gentlemen, the science has made an immense progress in pointing out the organ with which this disposition corresponds. Some called it a vice; others, a corruption of human nature. But this vice, this corruption, remained totally unexplained.

Application.—This organ exercises a marked influence on the character of man. In thieves, who are perpetually compelled to dissemble, it produces reprehensible actions. In the comedian, the part it plays is also very important. This curious observation belongs to COMBE, who remarks, that an actor is forced to dissemble some sentiments, and affect others which are foreign to his nature. In other words, to employ this organ for the repression of his own impulses, and the substitution of factitious feelings. In this case, however, the organ must act in concert with imitation. It is very useful to diplomatists, serviceable to courtiers, and commanders in time of war, for a general's thoughts should ever be impenetrable by those who surround him, as well as by his enemies. The intelligence may supply, for a short time, a deficiency of this impulse. I say *deficiency*, for the impulse exists in all men, as we all have the same organization; but, when weak, its place may be supplied by intelligence, which equally compensates feebleness in the organs of prudence or circumspection. But this is never kept for any length of time. You can always surprise a man who is cunning and prudent only from the effect of simple reflection; while, on the contrary, those in whom the organ is very large, and who naturally are very cunning, keep themselves perpetually on their guard, and never betray themselves by a rash action, word, or gesture. Every thing is, by these persons, calculated at its value,—a shake of the hand, or a smile. You can see, Gentlemen, how much of the character of a coquette this organ forms. This organ, then, exercises a very powerful influence on organization in general, and on the conduct of man in social life. The following is a *résumé* of observations which M. VIMONT has made on this organ:—

It contributes in a very high degree to the preservation of the individual. When moderately developed, and united with little circumspection and intelligence, it constitutes that class of men who, if we may use the phrase, you can "see through." These individuals are inclined to be cunning, but their intelligence is too feeble to aid it, and nothing is more easy than to penetrate their designs. When united with circumspection, and the faculty of induction, which reside in the superior anterior region of the head, this organ produces tact, and forms an essentially prudent character. Observe well, that I say "united to circumspection;" for if, unfortunately, the intellectual faculties are weak, and if the individual is deprived of elevated sentiments, secretiveness only produces the crowd of miserable beings who people our prisons. M. VIMONT justly remarks, that it is a great error to confound this organ with the intellectual faculties. It may direct the intelligence towards the appropriate object of secretiveness, but it inspires scepticism, and all the feeble arguments of men fruitful in subtleties, who are nothing in reality, who are silly in their cunning, *(finauds)*, deprived of real intelligence to aid their slyness. It is this which constitutes what are properly called sophists, among whom I am tempted to reckon certain enemies of phrenology. M. VIMONT remarks, that the expressions "cunning," "finesse," employed by GALL, only express different modifications and applications of the organ, while the main fact, as SPURZHEIM has clearly shewn, is the tendency to remove oneself aside for the purpose of observing others, and regulating our conduct thereby. SPURZHEIM has taken the most just view of this faculty, when he describes it as "a tendency to be clandestine in thought, project, and action." M. VIMONT also believes that GALL was mistaken in attributing to this organ the tendency which we observe in some animals to conceal the superfluous portion of their food. You know that dogs and wolves, when any thing remains after a meal, conceal it. This cannot depend on the organ of which we treat, but rather on *acquisitiveness*, or some other impulse which is not yet well determined. Besides, M. VIMONT thinks that it is difficult to comprise the functions

of this organ under one single expression, more especially as they are often combined with those of several other organs, as auxiliaries. The organ of which we now speak is aided by circumspection, with which, as SPURZHEIM has already remarked, it is continuous. You may see in the head which I now show you, the organ of secretiveness placed above that of destructiveness, and you may convince yourselves of its continuity with the large group of convolutions constituting the organ of circumspection. If we believe the observations of some phrenologists, circumspection is in some respects a more elevated faculty—a sentiment—while cunning is only an instinct. We might here examine whether this may not be merely a difference of words, but I will return to the subject at another time. For the present I will confine myself to an exposition of the organs in the order in which they are laid down by phrenologists, in order to facilitate your study of the science. I should embarrass you considerably were I to disturb the established arrangement, and, therefore, I propose to show you the different organs according to the order of their admission by GALL, and as amended by SPURZHEIM and COMBE. As occasion may present itself I shall add my own reflections. You, on your side, will make your own after nature observation and reflection, and the science will continue its march.

Antagonists.—This organ finds a corrective power in benevolence, friendship, and love of children. It frequently remains inactive in presence of the impulses communicated by these latter organs, or is merely seen in individuals in whom they lie dormant. It is also effectually checked by conscientiousness and love of justice, for nature has furnished the heart of man with all the different moral qualities.

Passion is one of the greatest enemies to dissimulation, for the cunning man who can govern himself, knows, that by exciting the passionate dissimulator he frequently discovers his most secret thoughts. He also knows, that the surest means of doing this is to wound his *amour propre*. His tactic is sure, but it sometimes fails, if the individual against whom it is directed should once discover it, and keep himself on his guard against future occasions. Man learns always from instinct. We learn caution without much trouble, by simply mixing with the world.

Animals possess this organ as well as man, but exercise it without reflection, and with feeble intelligence. It occupies the same situation in the monkey as it does in man. In carnivorous animals, the dog, the wolf, the fox, the pole-cat, it lies exactly above the line marked by the squamous articulation of the temporal bone, at the middle part of the lower edge of the parietal bone. In herbivorous animals, the space it occupies is more elongated, and it is much less developed. According to M. VIMONT's observations, the organ is very well marked in the fox, and you all know how LA FONTAINE has depicted, in striking colours, the finesse and cunning of that animal. It is small in the fawn, the rabbit, hare, squirrel, and in most birds, without even excepting those who feed on fruits. The exceptions and examples in the bird tribe, distinguished by their remarkable cunning, present a great development of this region; but the organ seems altogether absent in the cock. In the genus *corvus*, this organ is found a few lines above the small osseous process, placed at the extremity of the external auditory foramen, and in the large raven advances beyond the point by several lines. In granivorous birds it is placed behind and above the external orbitar process.

10.—ACQUISITIVENESS.

The next organ is that of acquisitiveness, or the instinct of acquiring; according to GALL it is the inclination to theft. This latter term has done some injury to GALL's system, and should be abandoned.

Situation.—This organ is seated at the inferior anterior angle of the parietal bone, above the anterior portion of secretiveness. In shewing the heads of celebrated thieves, I have already mentioned several very striking examples of acquisitiveness.

Primary influence and application.—This organ produces the desire of possessing, and a tendency to do whatever the intelligence may think necessary for attaining that object. This, I believe, is the clearest definition I can give you of it. The action, as you see, is subservient to the intelligence; when the latter is strong, the organ will inspire only honourable means; on the contrary, if the intellectual faculty be feeble, and other depraved instincts come into play, the means employed to acquire property will be of a culpable nature. This tendency exists essentially in our nature, and is the origin of all property. It is also found in animals; its application is seen in a tendency to amass and collect together the means of multiplying our different enjoyments,—gold and silver, money, whether in the form of paper or metal. Some writers think its influence does not end here, but that it inspires a desire of possessing every kind of property merely for the pleasure resulting from the idea of possession. Thus its application is various; applied to objects of natural history, this organ gives rise to the taste for collecting large museums, &c., to which their proprietors are closely attached. These collections are arranged with more or less art, according to the influence of the organ of order. Applied to objects of antiquity, it produces museums filled with ancient specimens of all kinds, and so on. This feeling exists strongly in

our nature; you should not confound it with love of place, or choice of habitation, which are two impulses of a different kind. It is a simple sentiment of property, resulting from the pleasure of forming, and saying "This is mine." Individuals in whom this organ is small cannot feel this enjoyment in any considerable degree; but when it is large they feel it exquisitely. This, again, is an organ which the philosophers have neglected to define or observe, but which they would place among the aberrations of their intra-cranial intellectual being; but here we confine ourselves to the observation of facts in natural history.

Antagonists.—The antagonists of this organ are found in the intellectual faculties which determine the conditions under which we can possess property, as benevolence, which inspires a tendency to share what we have with others, from the pleasure of doing good. These, as you must observe, have tendencies of quite an opposite nature, for the organ we speak of produces the idea "*that every thing is for me, and for me alone.*" Conscientiousness also acts as a corrective power; it is modified by friendship and family affections, for several misers become liberal towards their near relations; others, however, are quite insensible to the ties of kindred. MOLIERE has depicted the character of the miser in the most faithful colours, but we should see a good example of the impulse which it gives when very large; it is then that acquisitiveness dominates every other sentiment, for the miser is ready to humiliate and abase himself on every occasion, provided he acquires. In some people the desire for accumulating is truly insatiable, as soon as one thing is obtained they must add another to it, and the organ seems to acquire intensity of action in proportion as it is satisfied. You must not confound this instinct with ambition, which covets honour rather than riches. Both impulses exist equally in our nature.

Associations.—The union of secretiveness with cunning produces a tendency to theft, whenever the more elevated sentiments are weak; and if destructiveness be joined, the combination produces robbers who murder their victims.

Gentlemen, the most wretched objections have been raised against phrenology. Men who are incapable of studying a question with patience and long-continued attention, reject phrenology, and cry out—"We do not find the organs of acquisitiveness or destruction predominant in all thieves and assassins." Certainly not; one organ brings another into play, as one bad action often necessarily produces another still more guilty. A man commences to steal, often from the desire of possessing an object which he covets, and without the slightest idea of destroying life, or too often without reflecting on the consequences of what he does. In many other cases it is to satisfy a pressing want, for unfortunately such is the present state of social life, that misery is the principal cause of most thefts. He brings his cunning into play to carry his object; but, at the moment of executing it; his personal security becomes compromised, the fear of discovery, the terror of imprisonment, or the galleys, start up before him. The organ of destructiveness now intervenes, and he commits a murder. If once the latter organ is brought into action, it rapidly acquires a habit of acting, and, by a succession of unfortunate circumstances, a man who was never born for the destruction of his fellow-creatures becomes a most determined assassin. Every tyro is now fully acquainted with this; but the anti-phrenologists affect to be ignorant of it, in order to collect the most ridiculous arguments against the science, from the measurement of the organs of destruction and acquisitiveness in executed criminals. Here are the heads of cunning robbers, taken from GALL's collection; see how all the lateral portion of the head is developed. I have already shown you each organ separately. In house-robbers you will find the organs of cunning and acquisitiveness, and another organ, that of constructiveness, by which they are impelled to manufacture false keys, and other machines, calculated to serve their purposes. Courage and destructiveness are sometimes united to secretiveness and acquisitiveness. In this case we find the middle and lateral parts of the base of the brain extraordinarily developed. You may see an example of this in the assassin whose head I now show you; the region we allude to is never found so prominent in the heads of honest men, for if these organs are unfortunately developed in them, their intelligence and elevated sentiments are also sufficiently developed to resist the former and counterbalance the structural irregularity of the cranium. Here is the head of the famous LACENAIRE, of whom we are compelled to speak, because he has so often been quoted as an exception.

This head, gentlemen, furnishes an illustration of the law I have just mentioned. Look at the organ of destructiveness; it is surely very large; and looks still larger on the skull than in the cast. Acquisitiveness is also well developed, but is inferior to destructiveness and certain other organs. Look at his vanity and self-esteem; those are the organs which led him to commit so many crimes, rather than acquisitiveness. Many persons are guilty of theft to satisfy their other passions, and not for the mere love of acquiring; but as we have not yet taken up the sentiments, I will merely remark, that the distance between the two ears is very remarkable, and the posterior semicircle from one ear to another is much larger than the anterior one. This latter

fact shows that the greater portion of the cerebral mass lies posteriorly, and announces a predominance of the animal faculties over the intellectual. As to the elevated sentiments, we find some degree of caution, but I repeat that the predominant faculties are the love of approbation and imagination. These exceed judgment and prudence in LACENAIRE'S head, and such a combination must give self-esteem of a bad kind; add to this, great tenacity and little veneration, and you will understand how the force of circumstances may have led this man to the scaffold, who, placed under other influences, might have made a better man. If the time permit we will return again to this point. But to recur to the influence of acquisitiveness. Look at this cardinal's head, who, though he possessed sufficient intellectual faculties for his position in life, was dominated by excessive avarice; from 200,000 to 300,000 francs were found concealed about his person after death. Here is another head, which I have already shewn you more than once; it belonged to a woman of high family and great pride, who, though otherwise respectable, was too often led astray by the desire of possessing.

Deficiency.—Here are examples of a different nature. The negro EUSTACHIUS, who obtained the Monthyon prize of virtue, has this portion of the head quite flat,—benevolence was his dominant faculty. Whenever you would pass your judgment on any character, you must always pay peculiar attention to the dominant organ, whatever it may be. Here is the head of the Abbé GREGOIRE, a man remarkable for his frankness and his devotion to his friends, and to what he thought justice and truth, in a word, a man endowed with every virtue. See how a well-developed intelligence, with elevated sentiments, is united to sentiments of an affectionate kind. What predominance in the regions corresponding with these faculties! On the contrary, what a depression in the organs of cunning and acquisitiveness!

M. VIMONT, while seeking to determine the functions of this organ, makes the judicious remark, that it is not always necessary for an object to be useful that we may covet its possession, and that the thirst of acquiring depends on a primary instinct, independent of the intelligence, which, besides, can only exist in man. Compare this observation with what precedes, and you will then understand how a man may become a thief in three ways; 1st, to satisfy pressing wants; 2nd, to satisfy his other passions; 3rd, through the simple love of having.

Animals.—The same author has seen this organ very well marked in the quadrumana, particularly in the orang-outang; in the cat and fox it occupies the same place s in man and the orang-outang. M. VIMONT also observes, that the instinct of theft in some carnivorous animals who are domesticated, as the cat, dog, &c., depends rather on the want of alimentation than in a tendency to theft; while, on the contrary, the magpie has evidently a minute instinct of this kind, for it steals and conceals a multitude of objects unfit for food. This bird, then, obeys a primitive instinct of amassing objects; but we are quite unable to say why it prefers brilliant metals and precious stones to all other objects. This is not the case with several other animals. Every one knows (says M. Vimont), that if a cat or dog be well fed, they never steal. This single fact, applied to man, would support the still disputed idea that man most frequently is induced to steal through necessity, and nothing else. But, on the other hand, the example of the mag-pie agrees perfectly with the conduct of certain wealthy individuals who steal for the mere pleasure or passion of stealing. You know it frequently happens that people of a most respectable rank of life can never enter a shop, or house, without carrying off something. This is now generally regarded as a as a species of folly, and they are even watched by their friends, who return the objects stolen or pay their value. When a wealthy man is possessed of this singular passion, he suffers little or no inconvenience; but place the same disposition in an unfortunate being who has no means of satisfying his natural wants, and the result is frightfully different. This imperious caprice will lead him to prison, to the galleys, or the scaffold. For my part, I think, and I shall continue my belief until I see the contrary, that opulent thieves might correct themselves, provided the intelligence and elevated sentiments occupied any reasonable space in their brains.

In birds, this organ is placed above cunning, and enlarges, together with that instinct, the lateral parts of the head. We see it well marked in the magpie, in the jay, crow, and tom-tit. It is never found, according to M. VIMONT, in the Indian cock, common turkey, or gallinaceæ, which never present examples of their possessing this instinct.

SECALE CORNUTUM.

Dr. HOFFMAN recommends the secale cornutum as very efficacious against after-pains. He gives it in the dose of 5 gr. every two hours, with some powdered cinnamon. The pains and hæmorrage are, at first, increased, but soon diminish, and then disappear altogether.

Dr. STAUSE has given 5 or 6 gr. once or twice a day, with the best effects, in cases where the menstrual discharge is usually accompanied with severe cholicy pains. The latter are quickly dissipated under the influence of the ergot of rye.—*Berlin Med. Zeit.*, June 29th, No. 26.

OBSERVATIONS ON THE

MEDICINAL PROPERTIES AND USES

OF SOME OF THE PRINCIPAL

MINERAL SPRINGS OF GERMANY.

By J. I. Ikin, Esq., Surgeon, Halifax.

(*Continued from page 666.*)

The mineral springs which have their source in the chain of hills known by the name of the "Taunus," are very numerous, and particularly rich in medicinal properties. This chain has three great divisions, or ranges, one running towards the Rhine, one towards the Maine, and another towards the banks of the Lahn. Their predominant constituent is the talcose or chloritic slate, mixed in many places with mineral. The Romans, according to tradition, first discovered the presence of silver in this range of hills. Many interesting relics of antiquity are to be found amongst them, such as tumuli, coffins, vases, coins, and so forth. These mountains are specially interesting to the medical traveller and the geologist, on account of the striking natural phenomena connected with them. No less than twenty hot mineral springs take their origin in these mountains, and distribute themselves in the provinces watered by the Maine, the Rhine, and the Lahn. The first of the celebrated "Bains du Taunus" to be noticed will be those of Ems.

The mineral springs of Ems are amongst the most ancient in Germany. Their situation is confined to a narrow valley, formed by hills consisting of siliceous greywacke slate; the river Lahn running close at the foot of them. There are only two principal sources, the water of which is used internally, but there are several which serve to supply the baths. The temperature of the waters at Ems varies from 17 to 37 deg. Réaumer, or from 70 to 116 deg. Fahrenheit; they are found on analysis to contain carbonic acid in abundance, as well as carbonate of lime, carbonate of soda, sulphate of soda, and silica; it is stated that they also contain some peculiar "hepatic gas," to which is attributed the good effects so often said to be produced by them in affections of the chest, nervous disorders, and diseases of the womb. Of what this unknown and mysterious constituent really consists, I am at a loss to conceive, but be it what it may, its effects are truly wonderful, if we do right in believing all that is said in its favour. The reader will find an account of its alleged influence in the following pages, and then judge for himself. The ducal baths at Ems are on an extensive scale. They are known by the names of "superior" and "inferior," the two together containing 197 apartments. The charge for admittance to these baths is, however, much more expensive than is that to the private establishments, which are numerous, and sufficiently well fitted-up for all useful purposes. On the opposite side of the river Lahn, a new bathing establishment has been recently completed, which is on a large scale, and combines every means of comfort and convenience. There is also a spring at Ems, the use of which is found to be particularly efficacious in ophthalmia, both acute and chronic. There is another also, which is dedicated solely to the use of domestic animals, to whom, in cases of paralysis, chronic rheumatism, rigidity of the joints, sprains, and so forth, the employment of this spring, either in the form of a douche or a bath, is attended with the greatest benefit. The poor animals after a hard day's work seem to enjoy it exceedingly: its use is confined to the summer months. At a short distance from the last named spring, there issue from fissures in the wall, fumes of sulphurous acid gas, mixed with a little sulphuretted hydrogen, the inhalation of which proves very deleterious to all the surrounding domestic animals, especially the poultry. The waters of Ems are frequented by persons of all ranks, from all parts of Europe. It is, however, in affections of the chest, in nervous disorders, and in sterility, that the use of them is said to be most beneficial. Such is their character, that noble dames are continually resorting to them, with the expectation—at any rate with the hope—that their benign influence will reanimate their torpid and fruitless frames, and satisfy the desire of their lords. The illustrious mistress of these realms paid the mineral waters of Ems a visit last year, but they did not produce their reported usually good effects in her case. But fortune was said to be more kind to many other ladies who accompanied the Queen on that occasion, for, to the astonishment of all their friends, numerous hitherto hopeless cases among them had assumed a very different aspect before the court departed.

About five leagues from Ems is Geilnau, known in former times on account of its waters, but for a long period neglected and unfrequented, even indeed so recently as the year 1809, when, in a great measure, it regained its fame. The water is clear and brisk in appearance, and when mixed with wine the mixture sparkles and effervesces like champagne. Its principal constituents are carbonic acid gas, muriate of soda, carbonate of soda, carbonate of lime, muriate of manganese, and iron. The medicinal properties of these waters, along with their agreeable flavour, have caused so great a demand for them, that they are forwarded to all parts of Germany, and, indeed, all over Europe. In affections of the abdomen, in diseases of the bladder, and especially in cases of stone, they are held in high repute. Not only in confirmed cases of

stone are they used, but also to prevent the formation of calculi, where a tendency to that accumulation is known to exist.

Fachingen, two leagues from Geilnau, has also a noted mineral spring, issuing from clay slate, which was discovered in 1745. The constituent parts of the water are nearly the same as those of the Selters water (about to be noticed), excepting that it contains less muriate of soda, and more pure alkali, iron, and carbonate of iron. The water is very pleasant to the taste, and keeps fresh for a considerable time. It is sent into Russia in large quantities, and as far as the Cape of Good Hope and the Indies. It is much more easily digested than many of the mineral waters. In constipation of the bowels, in hæmorrhages, and in gravel, it is constantly exhibited.

Of all the mineral waters of Germany, those of Niederselters are most frequented. The spring rushes there from the foot of a mountain of clay slate, and graywacke, immediately at its junction with greenstone and amygdaloid, in an agreeable valley, watered by the river Ems. It is rich in carbonic acid and soda, which favours the dissolution of iron, found mixed in these waters as an oxide. "L'eau de Selters" keeps fresh for a considerable time, and on this account is carried into all parts of the world. The quantity exported is perfectly astonishing. The Duke of Nassau, to whom the spring belongs, receives from the sale of these waters, about 30,000 florins per annum, after deducting all expences; yet this spring was originally sold to the duke's ancestor for a single butt of wine. All the peasants, both young and old, inhabiting the surrounding country, gain their livelihood by assisting in drawing the water, bottling it, carrying the bottles to the storehouses, and corking and sealing them. Indeed, as the author of the "Bubbles of the Brunnens" amusingly states, at Neiderselters you see and hear of nothing else but "bottles, bottles, bottles." "The moralists there preach on bottles; life, they say, is a sound bottle, and death a cracked one; thoughtless men are empty bottles, and drunken men are leaky ones; and a man who is well educated and fit to appear in any country, or in any society, is, *of course*, a bottle of Selters water, corked, rosined, and stamped with the seal of the Duke of Nassau." The properties of these waters are, as is well known, at once cooling, and gently exciting, and tonic, and they promote the secretions, especially from the cutaneous surface, and act on the urinary organs, but cannot be said to be either purgative or laxative. Selters (or seltzer) water is easily digested, and is found to excite activity in the lymphatic and glandular systems. In robust and plethoric habits its daily use is highly beneficial. In tendency to the formation of calculus, it is frequently used in this country. It is not necessary to enumerate the numerous diseases in which the exhibition of these waters is said to be so advantageous. The good folks of Neiderselters, travelling authors, the authors of guide books, and all similar authorities, speak in far higher terms of their medicinal properties than I can be induced to do. In scofula, in pulmonary affections, in affections of the stomach, in diseases of the liver, in hæmorrhoids, in gonorrhœa (according to Hoffman), in gout, and in gravel, it is said to have worked wonders. This much, however, we may say in its favour, that in hardly any disease whatever can its use be counterindicated, excepting where the functions of the stomach are feebly performed, and there is a tendency to flatulence. If the visitor of Neiderselters wishes to taste the water in its purest state, he should do so at the spring itself, either on a Sunday or a *fête* day, when it will be found clear and pure; on other days the constant immersion of buckets, &c. produces a slight muddiness. One peculiarity of this water is, that if kept in a pitcher, or a bottle, on the *ground*, it soon loses its freshness, and becomes unfit for use, whilst its natural condition is easily preserved when it is placed upon *wood*. The usual dose is from half a pint to a pint.

Langen-Schwalbach, also in the Duchy of Nassau, (for this Duchy, by the way, is celebrated over the whole of Germany for its mineral springs), is another much frequented "Brunnen." Its baths are of ancient date, for in the time of the Romans the forest in which Schwalbach was situated contained a noted sulphur spring, famed for its medicinal effects; indeed its name, "Langen-Schwalbach," or "Long Schwalbach," indicates that it is of ancient date. The spring which is most frequented now, is a comparatively recent discovery, as only sixty years have elapsed since it came into vogue. Its properties are very different from those of the springs formerly employed by the Romans, the modern spring being strongly impregnated with iron and carbonic acid. The springs most used for medical purposes are, first, the *Weinbrunnen*, (wine spring), a name given it probably from the vinous flavour which it possesses; the *Stahlbrunnen*, (steel-spring), and, at a little distance up the valley, the fashionable *Brunnen de Pauline*. According to the latest analysis, the Weinbrunnen contains carbonate of soda, carbonate of iron, carbonate of the protoxide of manganese, carbonate of lime, carbonate of magnesia, muriate of soda, muriate of potash, sulphate of soda, silica, strontia, hydriodate of potassa, besides earthy and extractive matter. The ingredients contained in the Stahlbrunnen are nearly the same as those of the preceding spring, with the exception that its con-

stituents are not quite so numerous, nor is its specific gravity so great. Only a few years ago the new spring Pauline was discovered; it is situated above the Weinbrunnen; it does not contain so much iron as the other two, but as it possesses the advantage of novelty, Dr. Fenner prudently prefers it to the brimstone, or to any other brunnen in the country. It is named after the present Duchess of Nassau, and is now the most frequented spring at Langen-Schwalbach. Besides containing the same ingredients as the Weinbrunnen and the Stahlbrunnen, carbonic acid is found in it in greater proportion, as well as traces of titanium. There are other springs besides the three just mentioned, which contain the same substances, but in different proportions, as well as some ingredients which are peculiar to themselves. The peculiarities of the Rosenbrunnen and the Newbrunnen are, that they contain strontia, lithium, oxide of manganese, potassa, alumina, hydriodate of potassa, and sulphuric acid. As I have just stated, doctors differ about the merits of the individual springs, Dr. Fenner recommending the use of the Pauline, whilst Dr. Stitter prefers the Stahlbrunnen. It is customary to drink the waters two or three times a day, and to take a bath at 10, A. M. In cases of debility, marasmus, nervous affections, dyspepsia, and so forth, the use of the steel spring, or the Pauline, is found most beneficial. The iron is, no doubt, the active agent; the novelty of the scene, and the regular diet, certainly performing a prominent part in the cure. The temperature of the bath is generally adjusted to about 25 deg. Réaumer, or 90 deg. of Fahrenheit. The water resembles strongly a red decoction, and so powerfully is it impregnated with iron, that the linen, the towels, &c., become stained of a deep red. The friction employed in its use appears to me to aid the medicinal effect. Half-an-hour is the usual time spent in the bath, and as the water is so very strong an astringent, the effects produced on the surface of the body are often unpleasant and curious in the extreme. They are said also frequently to produce head-ach, sleepiness, and other slightly apoplectic symptoms, but it is probable that these bad effects arise from the strange aversion which the patients, as well as the physicians, have to allow the head to be immersed in the water. Perhaps the doctors prefer keeping their patients on their lists for a short time, to curing them all at once.

SCHLANGENBAD, or the "Serpent's Bath," also in the Duchy of Nassau, is the next we shall notice, as it is a very well known spot, but retired and melancholy enough for the strictest recluse. It owes its name to the serpents which swarm in the neighbourhood, and are found in abundance in the waters. Indeed, it is to the presence of these reptiles that the vulgar attribute the virtue of the water. For pleasure and gaiety the frequenter of watering places must go to Schwalbach-Weisbaden or Baden-Baden, but for secret retirement he must visit this secluded spot, provided he has resources within himself, and prefers contemplation to excitement and gaiety. Here he may at once sooth the ailments of his body, and calm the troubles of his mind. Though such numbers annually resort to Schlangenbad, it consisted of nothing, till very lately, but one huge old building, or "Bad-Haus," and a new one, along with two or three little mills, which are fed, as Sir George Head quaintly says, "by the crumbs that fall from the rich man's table,—turned by the famous spring of water, after great, fine, fashionable ladies have done washing themselves in it." The old "Bad-Haus" has been now pulled down, and a building on a new plan erected, in which the conveniences are on a larger scale. The effect which the water produces on the skin is powerful and singular in the extreme; the water is about as warm as new milk, but infinitely softer, and on rubbing it on the skin a sensation is given to the fingers resembling that which is produced by the friction of satin. A bath of this water is highly luxurious, from its emollient and relaxing properties. So great is the reputation of this water as a cosmetic, that people come from Russia, and all parts of Europe, to benefit by the use of it. Whether the effect is permanent I cannot say. At any rate, be its effects permanent or only temporary, the softness given to the whole surface is quite delightful. It serves to clean and purify the skin, acting, apparently, as a slight corrosive, and the effect is so evident, that ladies eagerly approach it from the most distant parts of Europe. Nothing but the real or fancied charm of the water could attract people to such a little sequestered, though beautifully situated, valley, for there is no town, as I have just stated, not even a village, at Schlangenbad. The virtues of this water were first discovered in the following singular manner, according to tradition:—"About 200 years ago, (says Sir G. Head), there was a heifer belonging to some one residing in the neighbourhood, which heifer was poor, emaciated, and diseased, and with which every thing in nature seemed to disagree. The more she ate, the thinner she grew; the more her mother licked her hide, the rougher and more staring was her coat. Not a fly in the forest would bite her, never was she seen to chew the cud, but, hidebound and melancholy, she passed her days in misery. So bad was she that her master, and all her species, gave her up for lost; but accidentally wandering to the situation of this spring, and drinking from it, her health began rapidly to improve, and, after a few more visits to it, she returned among the

herd, with ribs covered with flesh, eyes like a deer, skin sleek as a mole's, breath smelling of milk, saliva hanging in ringlets from her jaws. These circumstances were so striking, that the herdsman was naturally inclined to watch her steps, when he discovered that she wended her way in secret into the forest, until she reached this unknown spring, from which, having refreshed herself, she quietly returned to the valley. Soon afterwards, a young lady of Nassau showed symptoms strongly resembling those which had afflicted the heifer, and all remedies having proved unavailing, and the herdsman happening to hear of the case, she was induced to try the heifer's secret remedy, and in a very short time, to the astonishment of her friends, she became one of the stoutest and roundest young women in the duchy!" Since that time the waters of Schlangenbad have been a favourite resort of the wealthy from all parts of Germany, and, in addition to cosmetic powers, they are considered to possess medicinal properties of a more important nature, and numerous are the cases of consumption narrated as having been cured by them. The climate, however, is not adapted for consumptive patients, whatever the Duke of Nassau's agents may say to the contrary. The temperature of the water is about 22 deg. Réaumer, and the baths are generally arranged to 27 deg. Réaumer, or about 90 deg. Fahrenheit. It is found by analysis to contain the muriates and carbonates of lime, soda, and magnesia, with a slight excess of carbonic acid, which holds the carbonates in solution. The emollient feel is no doubt derived from the talc and clayey matter with which the water is combined. Talc greatly resembles mica, is easily broken into layers, gives a soapy feel to the touch, and contains a considerable quantity of magnesia, in which respect it differs from mica, as the latter contains very little, sometimes none. If the peculiar effect produced on the skin be derived from a sort of corrosive or chemical action, resembling that of strong soap, it would seem probable that the skin, from the repeated use of these baths, would become coarser, instead of finer. This, however, can hardly be the case, or we should not find such a repetition of fair visitors to the place. One good effect is sure to be produced here, viz., those who are tired of Langen-Schwalback, and have got their skins well dyed with its red decoction, may retire to Schlangenbad and wash themselves clean again.

Weisbaden, the capital of the Duchy of Nassau, is two leagues and a half from Schlangenbad. It is situated in a comparatively flat country, though amidst a hilly district. At the foot of one of these hills the town is built. The surrounding country is most beautiful; in front the rich valley of the Rhine, with its majestic river, is seen flowing serpentinely along, whilst on its banks stands Mayence, with its venerable towers, and behind it Le Mont-Tonnerre is seen, losing itself in the clouds. On the right are the scattered villages of the Rheingau, (a district of Nassau, extremely rich in all sorts of vegetable products,) and on the left stretches the fertile valley of the Mein, with the beautiful city of Frankfort in the distance. About 12,000 strangers are calculated annually to visit this gay watering place. If gaiety and amusement are the object of a visit, more may be had at Weisbaden in an hour, than could be had at Schlangenbad in a year. About 30 years ago Weisbaden was a dirty, confined place, but now a completely new town has been erected, evidently more for the accommodation of strangers than for the inhabitants themselves. It is, in fact, almost a city of lodging-houses, for the whole population, exclusive of strangers, does not amount to more than 8,000 souls. The Romans built baths here, the remains of which still exist. A people called Mattiaci then inhabited it. Even in those times it was observed, says Sir Geo. Head, that these waters retained their heat longer than common water, or salt-water, of the same specific gravity, heated to the same degree. Indeed, Pliny remarked, "Sunt et Mattiaci in Germaniâ fontes caladi, quorum haustus triduo fervet." There are at Weisbaden fourteen hot mineral springs, and two cold ones, employed solely to supply the baths. The spring termed the "Knock-brunnen," or boiling spring, has the highest temperature, being about 52 deg. Réaumer, or 146 deg. Fahrenheit. There are also two sulphurous springs. According to the *French* calculation, the whole of the mineral springs at Weisbaden furnish 58 cubic feet, and 397⅝ cubic inches of water in a minute. Thus, in the space of twenty-four hours, they will supply 84,092 cubic feet of water, of which 44 cubic feet, and 684 cubic inches, are sent every minute to the baths; so that 13 cubic feet, 712 cubic inches, surplus, remain every minute, even though the baths are in such constant use. This quantity will make a surplus of 19,746 cubic feet in every twenty-four hours. The water employed during twenty-four hours, including that for the baths, and that used for domestic purposes, is estimated at 32,720 cubic feet. At all periods of the year the temperature of the water remains very nearly the same. The taste of the water greatly resembles hot chicken-broth. When a bath is filled with it, a thick, dirty-white, greasy scum rises to the surface; this, when present, is considered to be the best test that the water has not been disturbed by a previous bather. The baths are obliged to be filled over-night, in order to cool sufficiently for the morning. Thirty-five minutes, or half an hour, is the time usually spent in the bath. The constituents of these hot springs are numerous. For example,

they are found to contain carbonate of lime, magnesia, muriate of soda, muriates of lime and magnesia, sulphates of lime and soda, and a small quantity of iron, dissolved in the sulphate of soda, besides clay and earthy matter. Their medicinal properties are numerous and diversified; but against gout, rheumatism, cutaneous affections, paralysis, rigidity of the joints, in chronic cases of syphilis, and in cachexia from mercury, these waters are constantly employed, and it is said with the greatest success. Stories are, of course, told of people *crawling* to Weisbaden, and *running* home again, and numerous are the crutches triumphantly displayed as having belonged to persons who have there thrown them away. There is also a horse-bath here, which is much used. The whole of the animal is immersed, saving his head, the halter being tied to a post, and the beast luxuriates and soaks himself in it for half or three-quarters of an hour. The country surrounding Weisbaden is extremely rich in mineralogical and botanical specimens.

Soden, (a name given to it from its saline springs,) is three leagues from Frankfort, and belongs also to the Duchy of Nassau. The mineral springs are three in number. Their temperature varies from 14 to 15 deg. Réaumer, or from 63 to 68 deg. Fahrenheit. They contain carbonic acid, carbonate of soda, muriate of soda, and a little iron. Medicinally they are employed in the treatment of rheumatism, gout, &c.

Not far from Soden, in the valley near the ancient castle of Kronberg, there is a mineral spring, rich in muriate of soda, iron, and sulphur, but attended with no accommodation for bathing. From the constituents of the water, it will, probably, some day be turned to good account.

We have now shortly described the principal mineral springs of the Duchy of Nassau, or of the hills of the Taunus,—the Selters, or Seltzer-water, which is a luxury in every quarter of the globe; the wonder-working waters of Ems; the bracing springs of Langen-Schwalback; the softening, soothing baths of Schlangenbad, and the boiling chicken-broth of Weisbaden, to the latter of which the mercurialized syphilitic patient may hasten, "body and bones," with a fair chance of driving the foul fiend from his troubled frame.

It is scarcely necessary to remind the reader, that Seidlitz-water is found in its natural state in a village of Bohemia, Hoffman having discovered this saline mineral water. It is strongly impregnated with sulphate of magnesia, and it is this, along with the small quantity of muriate of magnesia that it contains, which gives it a bitter-saline taste, as well as purgative properties.

At Karlsbad, in Bohemia, there is another mineral spring of celebrity; indeed, the town is built on the crest of a vast boiling reservoir. The principal spring, called the "Sprudel," issues, with great vehemence, through a natural vault or incrustation of stalactite. The temperature of this fountain is 165 degrees Fahrenheit, at all periods of the year. Hence there is much steam evolved. Some of the other springs are only 120 deg. to 125 deg. Fahrenheit. The taste of this water is strongly alkaline and chalybeate. It has scarcely any smell, as it contains nothing sulphurous. The water is remarkable for a very rapid deposit of carbonate of lime, which, cooling, forms a beautiful hard stalactite that incrusts any wood or moss which remains in it for a day. Along with the carbonate of lime, the iron which it contains is also precipitated, presenting, with the former, a beautifully variegated stalactite. Karlsbad water contains carbonate, sulphate, muriate of soda, and, when still hot, carbonate of lime, held in solution, and also carbonic acid uncombined, silex, and carbonate of iron. The existence of iron in this water, as in that of Bath, is only sensible to tests when applied immediately at the spring itself, when, if some of the fresh water be put into a bottle containing a slice of the gall-nut, a very sensible purple colour is immediately produced, and, on cooling, the minute quantity which it contains, separates, as a fine, flocculent, whitish-brown oxide, and the test of galls no longer produces any effect. It is calculated that in 100 cubic inches of water there are—

39 grains of carbonate of soda, equal to 107½ when crystallized.
70½ grs. of sulphate of soda, equal to 168 when crystallized.
34½ grs. of muriate of soda.
2½ of silex, and ½ of oxide of iron.

Sulphate of soda is manufactured from this spring, and sold in considerable quantities. Medicinally, these waters are employed in dyspeptic cases, in obstructions of the abdominal viscera, in diseases of the kidneys and urinary passages, and in affections of the uterine system.

The water of Pyrmont (a village in the circle of Westphalia, now part of the kingdom of Hanover), is so celebrated and well known, that it must not pass unnoticed; but we shall be very brief, as we consider it preferable to dwell more at length on those mineral springs, the properties of which are comparatively unknown to British practitioners. Pyrmont water is a brisk acidulated chalybeate, and affects persons who drink it with a sensation somewhat resembling that produced by intoxication. The spring issues from variegated sandstone, close to its junction with Jura limestone. Analysis of this water proves that it stands amongst the first in rank as a carbonated chalybeate, and it contains such an abundance of carbonic acid, as not only to hold in solution a great number of carbo-

nates, but to show all the properties of this acid uncombined, and in its most active form. It is a very hard water, in consequence of the earthy carbonates and selenite contained in it. The diseases to which it may be advantageously applied, are the same as those of Spa, and the other acidulated chalybeates, viz., in debility, where an active tonic is required without too strong a stimulant; in the various disorders of the alimentary canal, especially in bilious vomiting and diarrhœa, and in complaints which originate from obstructed menstruation. The dose is from one to three or four English pints, taken during the morning. Its common operation is by urination, but if taken copiously, it proves laxative; and when it has not that effect, from one to five or six drachms of some purging salt may be added.

We have wandered from the duchy of Nassau up into Bohemia and Westphalia. It is time we should return to that part of the country, at least to the Black Forest, the universal springs of which we stated, at the onset, we should consider after those of Nassau; the consideration of them will not detain us long.

The most noted are those of BADEN-BADEN. This gay, gambling, beautifully-situated town, is one of the most frequented of all the German brunnens. A more delightful place the invalid or *ennuyé* could not wish to visit. Here you have, displayed the greatest beauties of nature, and the highest refinements of modern art and luxury, along with the most noble relics of antiquity; and, combined with these, it has all the advantages of a rural retreat. No one can see Baden-Baden without admiring it; it possesses all that is desirable in a place of this kind, viz., excellent hotels, handsome assembly rooms, pleasant streets, charming promenades, and handsomely fitted baths, without number, both public and private. For myself I prefer Baden-Baden to any watering place I ever visited.

Its deservedly celebrated mineral springs are thirteen in number, varying in temperature from 37½ to 51 deg. of Réaumer, or from 116 to 149 deg. of Fahrenheit. The principal source (or "Ursprung") has the highest temperature, and is the most abundant. It gushes out from a cleft in a rock close to the old castle or hall, the residence of the Grand Duke. This spring furnishes, in 24 hours, 7,345,444 cubic inches of water. The ancient well and other relics prove that the Romans not only knew of this source, but used it. At a short distance from the ursprung is another spring, the "Brühbrunnen," which is used principally for domestic purposes, such as dressing fowls, &c.; its temperature is 50 deg. Réaumer, or 146 deg. Fahrenheit. The "Heil-spring" (Hoellenquelle) like most of the rest, rises in the immediate neighbourhood of the principal source, or ursprung. The baths are almost numberless: in the Hôtel de Bade alone there are 32 private ones. Here are also vapour baths; baths for the poor, along with a hospital; one also for the poor persecuted horse, and the rest of the tribe of domestic animals. Analysis proves these springs to contain muriate of soda, muriate of lime, and magnesia; sulphate of lime and carbonates of lime and iron; also saccharine matter. One pound, reckoning 16 ounces to the pound, furnishes 16 grains of muriate of soda, 23 3-10ths of sweet matter, and from one to two grains of the other ingredients. These baths have been found of great service in rheumatic affections, gout, paralysis, hysteria, hypochondria, cutaneous affections, and their sequelæ; disorders of the abdominal viscera, especially constipation, hæmorrhoids, &c. Locally, they are used in the treatment of wounds and foreign growths.

The other mineral springs of the Black Forest which I shall notice are, comparatively, insignificant, and they are all chalybeate, without exception, Baden being the only thermal spring. The waters of PETERSTHAL are much frequented by the middle and lower classes, for nervous affections, rheumatism, and abdominal disorders. Near to it is GRIESBACK, whose mineral springs are of the same nature, but rather more powerful. The waters of the baths of AUTOGAST are not quite so strong; but those of RIPPOLDSAU are considered amongst the most efficacious of any in the circle of the Black Forest. A considerable quantity of this water is exported. In obstructions of the bowels, hæmorrhoids, diseases of the bladder, and chronic rheumatism, it is said to be most efficacious, as well as in increasing the activity of the glandular and absorbent systems.

The predominant ingredient in these springs is carbonate of lime, which is found in nearly the same proportions in all four; they contain also muriate of soda. The spring of Griesback contains the least of it, but has the largest quantity of carbonate of iron. In the waters of Rippoldsau are found, besides the carbonate of lime, carbonate of iron, and also sulphate of soda and sulphate of lime. The last-named places are all in the same neighbourhood, but much higher up in the duchy than Baden, and in a part of the country that is not much less frequented by strangers.

We will now pass on to SWITZERLAND. Mineral springs are found in this country, and are much frequented. We shall only notice the two principal ones, viz., those of St. Mority and those of the baths of Pfeffers. ST. MORITY is situated in the Upper Engadine, in the Grisons, on the margin of a small lake, and during the months of June, July, and August, is crowded with visitors, Swiss, German, and Italian. The proper-

ties, as furnished by an analysis of the spring, are nearly the same as those of Schwalback, Spa, and Pyrmont, and are confidently reported, by those who know them, as being even more efficacious than their German rivals. One great disadvantage in the place is the want of an inn for the reception of invalids, and for the comfort of visitors generally, who are obliged to lodge in private dwellings. The source is about an English mile from the village, so that to drink the waters the patients have to walk or ride that distance, and have to put up with a miserable shed as the only protection from the changes of weather, which, at an elevation of 4,000 feet, and surrounded, as the place is, by glaciers, is here very capricious and searching during even the summer months. It is a subject of astonishment to foreigners to observe the bad policy of the government in not furnishing the necessary accommodation in a place which, from its natural beauties and medicinal attractions, might become one of the most frequented in Europe.

The "Baths of Pfeffers," in the canton of St. Gall, are, perhaps, the most extraordinary in the world. These thermal springs take their source in a gorge of the impetuous Tamina, the horrors of which, says a modern author, "defy alike the power of imagination and the pen of description." The gorge is so deep, that the rays of the sun only penetrate it for four hours during the day. The spring was known as early as the year 1038, but, owing to the difficulty of gaining access to it, was soon neglected, and at last forgotten for nearly two centuries, and was only turned to account after its second discovery in 1240. A hunter, as it is stated, risking his neck for the possession of a raven's nest, saw the vapour oozing from the abyss, and made known this discovery for the public benefit. In 1420, the first building was erected for the reception of invalids. As it would be foreign to the pages of a medical periodical to enter into a description of the scenery, I shall refrain from doing so, but recommend the reader to refer to Dr. Johnson's pamphlet on the "Baths of Pfeffers," and to Dr. Beattie's interesting and beautiful work on Switzerland.* As what I have to say on the medicinal properties of these baths cannot be better expressed than in the words of Dr. Beattie, I shall take the liberty of quoting from them, not being able to obtain Dr. Johnson's pamphlet at the present moment. The healing properties which are ascribed to these waters are numerous, and supported on the best of all authority, that of experience and the successive testimony of twenty generations. The springs are occasional, and appear and disappear indefinitely, according to the peculiarities of the season. In summer the supply varies from one hundred to two hundred gallons per minute, with a temperature, generally, of 100 deg. Fahrenheit, and never below 90 deg. In the baths it is uniformly at 100 deg.; its properties are not detected by colour, taste, or smell. The water is extremely limpid, leaves no deposit after being kept for years, and in specific gravity is less than that of Bala Lake in Wales, which is, with this exception, probably the lightest in Europe. It is employed both as a bath and as a beverage. Those who have tasted the Ems water will form a pretty correct notion of that of Pfeffers. As the water gushes from the source, a faint smell of sulphur is sometimes perceptible; and to the touch it is soapy, and deposits on the rock a bright yellow clayey sediment, (used as a surgical dressing,) consisting of various earths which are common to micaceous mountains. The time for remaining in the bath varies, according to circumstances, from two to ten hours; and, strange as it may seem, the patients who resort to Pfeffers on the Saturday, frequently spend the greater portion of the interval between that and Monday in a state of immersion. The medicinal properties of this water are in a state of extreme dilution, the same as in most other mineral springs, literally in homœopathic doses, but their virtues are developed in numerous cases which, reasoning on therapeutical principles, it is impossible to explain. The diseases in which the water is chiefly employed are rheumatism, (the chronic form, I suppose, for in acute rheumatism such remedies are more likely to do harm than good, at least Dr. Johnson and many other eminent physicians are of this opinion,) glandular and cutaneous affections, and, indeed, in many other diseases; for as the water has obtained a high reputation for its efficacy in these complaints, it is now looked on as a panacea in the whole range of therapeutics. The following is the most recent analysis of this water:—

	Grains.
Muriate of magnesia	0.16
Muriate of soda	0.21
Resinous substance	0.06
Sulphate of soda	0.62
Sulphate of magnesia	0.37
Carbonate of lime	0.32
Carbonate of magnesia	0.87

"It is a remarkable fact," says Dr. Beattie, "that when the plague of 1611 made such terrible ravages in the country that whole villages were depopulated, and even dogs, cats, and birds fell dead under the poisoned atmosphere, these baths served as a perfect sanctuary to refugees, with whom they were crowded, even during the winter, and who never betrayed a symptom of contagion."

In Savoy, the baths at Aix-les-Bains and of St. Gervais, demand notice. It is at the

* Dr. Ruysch and Dr. Kacher, German physicians, have written works on these baths.

former place that the douching system is carried on in such perfection, and so great a celebrity has Aix-les-Bains obtained, that persons flock to it from all parts of Europe. Five or six physicians reside in this small town, and are almost exclusively engaged in taking charge of the patients using the douche. The senior physician of the establishment is a very agreeable, well-informed man, and has gained some fame for his mode of treating epilepsy. From him I received a great deal of information concerning these baths, and on the various modes of applying the douche, for being a member of the profession, I was allowed to witness the process, both as performed on the male and the female patients. The physicians always superintend whilst the patient is undergoing the operation. By the douche is to be understood the forcible impulsion of the mineral water on different parts of the body. Many kinds of affusion, as, for example, the "douche descendante," the "douche latérale," and the "douche ascendante," are daily employed at Aix-les-Bains. The direct application of the water is employed in disorders of the mucous surfaces, even of those of the vagina and the rectum. The efficacy of the douche is increased by friction, which acts as a local stimulus, often of a very powerful description, as manifested by the redness and pricking sensation, and, often, the copious perspiration, which follow its use. In each douching cell two copious streams are constantly pouring; two douchers, or douchettes, direct its application, and continue a brisk friction during the process, the patient being seated in the bath, which gradually fills as the operation goes on. The two thermal springs arise at about 300 yards from each other, from rocks of white compact shaee limestone. The upper one, or "Source de St. Paul," improperly called the "alum spring," gushes from the rock beneath an antique archway. It has nearly the same temperature as the lower or "sulphur spring," viz., about 117 deg. Fahrenheit, but in rainy seasons, from mixture with the surface, or cold springs, they are lower, being reduced to 111 deg. The "alum spring," as it is termed, also supplies a reservoir, or large bath, which is used for douching horses that have lumbago, or stiffness of the joints. The water of the "sulphur spring" is nearly tasteless, emits the odour of sulphur, but not of sulphuretted hydrogen; it is peculiarly eligible for the operation of douching, the water being of the requisite temperature as it comes from the rock. The season of taking the douche is from the middle of June to the latter end of September. The annual number of patients varies from 1,500 to 2,000; the patients seldom remain more than three weeks at a time, the process being too severe for a longer period without intermission. The whole expence of douching, including the porters who carry you home in a blanket, is only one franc and a half, (fifteen pence.) There is, perhaps, no place in Europe where douching can be practised with so much advantage as at Aix-les-Bains. There is water sufficient to douche a thousand persons daily. Apartments exist, where the poor are douched gratis. Each bath or cell is an arched vault, about 13 feet long, 11 wide, and 22 feet high from the top to the place where the patient sits. The use of the douche is chiefly indicated in indurated or indolent swellings, in partial anchylosis, or contractions remaining from dislocations; in stiffness and rigidity of the joints, resulting from rheumatism or gout; as a tonic remedy in the debility of particular muscles arising from sprains or over-exertion. In some chronic and circumscribed cutaneous eruptions, the affusion of sulphurous waters in this form may supersede the use of the general bath.* M. Bouvoisin gives, in the memoirs of the Royal Academy of Sciences, at Turin, the following analysis of the water:—In 28lbs. of water of the sulphur spring at Aix-les-Bains—

	Grains.
Sulphate of soda	9
Sulphate of magnesia	19
Sulphate of lime	11
Muriate of magnesia	4
Carbonate of lime	30½
Iron	1

Also hepatic gas, with a small portion of carbonic acid gas, about one-third of the volume of water.

In the same quantity of water from the spring called, improperly, the "Alum Spring:—

	Grains.
Sulphate of soda	6
Sulphate of magnesia	6
Sulphate of lime	18
Muriate of lime	4
Carbonate of lime	32
Iron	2

Also a peculiar kind of hepatic gas, combined sulphurous acid gas.†

The "Baths of Breda," in the TARENTAISE, have a temperature of about 97 deg. Fahrenheit. They contain sulphate of magnesia, muriate of soda, sulphate and carbonate of lime, and a small quanity of sulphate of soda, carbonate of magnesia, and carbonate of iron, with a trace of alumina and silex. The gaseous products are carbonic and sulphuretted hydrogen. The rock from which they spring is talcous slate, very soapy to the touch.

The last place we shall notice, for it

* Vide Dr. Gardner's valuable essay on mineral and thermal springs.

† A detailed account of Aix-les-Bains may be found in Bakewell's Travels,—a work abounding with information.

would fill volumes to describe, in a very brief manner, all the mineral and thermal springs of the continent, will be the baths of St. Gervais, situated between Sallenches and the far-famed valley of Chamouni, in a deep ravine, just below an impetuous cataract. The waters of St. Gervais have all the qualities of those of Harrogate, with a temperature approaching to those of Bath. They are, therefore, found of great efficacy in many cutaneous diseases, and it is for the cure of such diseases that they are chiefly resorted to. The spring issues from the bottom of a rock composed of talcous mica slate, in conjunction with limestone.

Before concluding my remarks on the thermal springs of the Alps, it will not be out of place to observe, that Mr. Bakewell, the celebrated geologist, considers that these hot springs owe their temperature to subterranean fire, contrary to the opinion of most philosophers, who assert that there are no indications of the operations of subterranean fire in the Alps. Mr. B. asserts that there is one circumstance in which these thermal waters agree, viz., that they all rise near the bottom of the great calcareous formation which covers the northern side of the Alps, and near its junction with the mica, or talc slate, which covers the granite; and that, as they break out near the feet of the great range of the Alps, and extend from the northern side of the Simplon to the confines of France, even into Dauphiny, in nearly the same direction, we may infer that these mountains are placed over or near to one common source of heat, to the agency of which they owe their high temperature.

A few words on the action of mineral springs on the human frame. It is not to be forgotten that the effects of a spring are often decidedly the reverse of what we should expect from its known chemical composition; sometimes even, as Dr. Gairdner justly remarks, "a common drinking spring will contain more mineral matters, than 'medicinal' waters of great reputation; nay, in many springs of very great celebrity, chemistry has been able to detect so few active ingredients, that several persons have attributed their virtues solely to the great purity of the water." Warmth, by enabling springs to hold in solution a larger quantity of active ingredients, adds to their activity as medicinal agents. The almost inexplicable effect of some mineral springs may be owing to certain volatile ingredients, which are incapable of being detected by the most delicate analysis. Some of the effects produced may be owing not merely to the water itself, but to its elevated temperature; and the simple circumstance of dilution may facilitate the operation of matters which might otherwise pass little changed through the alimentary canal. The active particles are thus presented to the sentient mouths of the capillary absorbents, and carried into the circulating mass; for in what other way can the powerful effects of many chalybeate springs be explained? The strongest of these does not contain more than five grains of the carbonate of iron in a gallon of water, at least I have Dr. Gairdner's authority for this statement. The quantity, then, of this substance carried into the stomach, by a single dose, must be extremely small, yet a more salutary influence is thus produced upon the system, than by twenty times the dose of the artificial carbonate. Dr. Saunders, in his treatise on mineral waters, another valuable work on the subject, supports the idea "that dilution acts by presenting a greater surface of contact for the active ingredients, upon the *nervous* papillæ of the stomach;" this may co-operate with absorption in promoting the effects of minute particles of matter, but cannot alone satisfactorily explain the physiological and therapeutical effects produced. In those springs which contain a large quantity of carbonic acid, nervous stimulation accounts very well for their primary exhilirating powers on the cerebral system, but the subsequent effects are inexplicable, unless we take into consideration the action of the absorbent and circulating systems. Dr. Johnson considers thermal waters to act in three principal ways on the human machine,—1st., through the medium of *sensation* on the nervous system; 2ndly, through the agency of *temperature* on the vascular system; and, 3rdly, by means of their chemical contents on the secretory and excretory organs. Besides the effect of dilution and warmth in promoting the medicinal powers of mineral waters, the moral influence of the circumstances attending their exhibition on the mind of the patient is not to be forgotten. The change of scene and habits, alone, are calculated to effect a material improvement in cases of hypochondria, dyspepsia, and all diseases which are comparatively innocuous; but it would be going too far to lay it down as a general principle, that this is the secret of all the boasted cures which follow visits to mineral springs. It is true that Cullen, and many other illustrious persons, have given sanction to this opinion, but that is no reason why we should deny the benefits which experience has now fully proved to be attached to the exhibition of a great quantity of these mineral waters. In alluding to the opinions of others concerning the action of thermal springs, I might have stated that Baron Alibert (a good authority on these subjects), considers all hot springs, and most mineral springs, to be physiologically and therapeutically stimulant; and that the degree of excitation which they are capable of producing, is proportionate to their temperature. Had not the subject already carried me to a greater length than I at first anticipated,

I should here describe, in a condensed form, the general effects of the *different classes* of mineral springs,* suffice it now to remind the reader, that there are six different classes of mineral springs—1st, *Chalybeate waters;* oxide of iron, characteristic. 2nd, *Sulphurous waters;* sulphuretted hydrogen, characteristic. 3rd, *Acidulous waters;* carbonic acid gas, characteristic. 4th, *Purging waters;* sulphates of soda, or magnesia, characteristic. 5th, *Saline and briny waters;* muriate of soda, characteristic. 6th, *Alkaline waters;* carbonate of soda, characteristic. Though the observations, which I have now brought to a close, may be very imperfect, they still present a mass of *facts*, which may prove to be interesting, as well as useful, to many of the readers of THE LANCET. Those who have not leisure to wade through large volumes on the subject, may perhaps advantageously devote an hour to the perusal of a paper of this kind.

*** A tabular view of the characters of all the springs described, will next week complete this paper.

ACTION OF MERCURY.

DR. WILSON PHILIP'S PRACTICE.

To the Editor of THE LANCET.

SIR:—Having lately perused a work written by Dr. Philip on the administration of minute doses of mercury, I am obliged, I shall not say how reluctantly, to differ from so high an authority in certain respects. My reasons for dissenting from Dr. Philip's views, together with some further remarks as to the action of mercury and the relation of the liver to abdominal diseases, &c., I beg to forward for publication in your very valuable periodical.

The action of mercury Dr. Philip states to be twofold, exciting and sedative. We know little, however, respecting it, after all that has been said and written, except the obvious phenomena which result from its exhibition, viz., an accelerated pulse, some constitutional fever, irritability, excitement of the organs of secretion, &c. Whenever we observe any effects which are positively and *immediately* referable to the mercury, we observe the above effects, more or less. Which of them can be called *sedative?*

I can well conceive, meantime, how the sedative *result*, which Dr. P. considers to be the *effect*, of a certain quantity, or a course of mercury, may be accounted for, viz., 1st—According to a general law of excitants, which, after a time, lose their exciting power; 2nd—When lost, a corresponding depression results, not, however, the immediate effect of the mercury, but a *constitutional* depression, naturally resulting from the lack of a wonted, continued (now exhausted) stimulus. If this principle be true, it follows that you in vain seek a stimulant effect by continually lessening the dose, as Dr. P. directs, in order to correct its sedative effects; and if he would, at all hazards, have the mercurial stimulus continued, he should continually increase the dose. This, of course, I mention as an inference, not as a point of practice.

Again, Dr. P. has mentioned the efficacy of minute doses to produce even ptyalism, when large ones had failed. The principle, however, on which this depends, and from which I hope to deduce an useful practical modification of his excellent discovery, he has left altogether unexplained. I think that it can be sufficiently accounted for by the well-known property of certain medicines to accumulate, and, after a considerable period of incubation, to break out with sudden, and, perhaps, destructive violence. Hence I should, *à priori*, expect that unlooked-for and violent ptyalism which he mentions as having occurred after the employment of minute doses in some of his patients.

If, then, we wish to avoid salivation, which it is both injurious and difficult to control, I would put the following case:—If, after administering a quantity of mercury, in minute doses, we see no visible effects whatever, are we to continue the *same* method of prescribing the medicine, and run the risk of this most dangerous effect of accumulation? Would it not be safer, when the state of the stomach does not contra-indicate the practice, to seek the effect of blue pill, or calomel, by a combination of tartar of antimony? or, when this would be injudicious, to make the slightest impression by *v. s.*, and afterwards administer the mercury, at first in rather full doses, and then to maintain its influence by minute quantities, given *ad libitum*? In many cases both a moderate venesection and tartarized antimony may be compatible.

This mode, when judiciously conducted, I have found, both in hospital and private practice, almost invariably to succeed; at least, when it has failed, I have never known minute doses to succeed afterwards. Further, in *what manner* the large doses were employed unsuccessfully, previous to an opposite result of the minute doses, Dr. P. gives us no account.

Now, with respect to the liver, and the frequency of its implication in abdominal disease.

Of this the most prominent, I may say, the solitary, symptom, pointed out by Dr. Philip, is pain, on pressure, in its region. But pain on pressure in a certain region, without concomitant symptoms, taking into account the variety of situation of the viscera in the normal and abnormal condition, and their changes of relative position, in

* On this subject vide Dr. Gairdner's work.

consequence of the full or the empty state of the stomach, I have always considered to be a vague and imperfect basis of diagnosis. Anteriorly, the lower surface of the liver is in contact with the stomach, when the latter is distended, but, when collapsed, with the transverse arch of the colon. This, and the almost constant mistake of gastroduodenitis for hepatic disease, from pain on pressing the right hypochondriac region, induce me to believe that the liver is frequently taxed with aberrations which should be set to the account of some portion of the intestinal tube. The pain might further arise from pleurodynia, or, though severely complained of, after all, might only be imaginary, as some invalids complain of *whenever they are pressed*. Again, it is an uncertain sign, as being frequently wanting where there is real disease, *e. g.*, in cerebral complications. The above pathological mistakes I consider to be further confirmed by the successful use of such medicines as are principally addressed to the liver, the treatment in such cases being somewhat allied, but in cases of doubt, as Dr. Stokes well argues in the *Ency. Prac. Med.*, it is better to give the patient the benefit thereof, and treat him for gastroduodenitis before we have recourse to more hazardous modes to relieve hepatic disease.

But it may be enquired, "If the liver be not so universally implicated, how do you explain the almost invariable success of mercury, which is so well known to act on that viscus? Why should the liver especially disengage the other abdominal viscera from disease?" I have satisfied myself by the following deductions from its structure and functions. Its parenchyma is principally composed of terminations, or convolutions, of arteries and veins. The vena portæ is an exception to other venous structures, as regards the venous current being from trunk to capillaries. The cellular sheath which accompanies it has a power of accommodating itself to the quantity of blood which traverses it, (see Cloquet,) and whatever excites the hepatic and abdominal circulation, removes visceral congestion :—

1stly. On hydrostatic principles,—the aggregate of ramuscles of the vena portæ being greater than its trunk in calibre, and the current being from the latter to the former.

2ndly. From the power of the cellular sheath to accommodate itself to the increased volume of the venous current.

3rdly. From the increased secreting power of the liver, by the excitement of the mercury acting as an intestinal issue, and, from the same stimulating effect, increased intestinal absorption in addition, to its general effect on the skin.

4thly. In the formation of bile by eliminating the carbon of intestinal blood, in forming the resin of the bile, which latter, as an increased excrementitious matter (which, however, may be converted to use as a natural purge, yet still be a foreign body,) by lessening the impurities of the abdominal circulation may thus, perhaps, relieve the inflammatory process which may, in reality, pertain to the intestinal tube. In all these circumstances, mercury, though still a stimulant, on the principles of counter-irritation and derivation, (the latter being favoured by the structure of the liver and peculiarity of the current of the vena potæ,) may counteract and relieve the abdominal or other inflammations, very erroneously attributed to the liver, but which, notwithstanding, means addressed to it may have the power to controul.

Be this as it may, should the happy mean which I suggest between the practice of Mr. Abernethy and that of Dr. Wilson Philip, as to the mode of employing mercury, be as successfully attested by the experience of my professional brethren as it has been in mine, I shall feel much delighted.

I am, Sir, your very obedient servant,

CHARLES WILSON EDWARDS.

9, Lansdowne Terrace,
Cheltenham, August 12, 1836.

TREATMENT OF FRACTURED BONES WITHOUT SPLINTS OR TIGHT BANDAGING.

Dr. JAMES INGLIS, of Castle Douglas, in a letter dated August 9, informs us, that since the transmission of his communication in July, (for which we were unable to find a place in our columns until last week), two other fractures have occurred in that neighbourhood, under the hands of different surgeons, both of which have been treated without splints, and in the most satisfactory manner.

"One of them," he says, "I saw the other day, and of it I can speak from personal observation, although I have heard directly from both the surgeons regarding each case. The case which I saw was that of John Chisholme, residing at Old Abbey, near Kirkcudbright. The thigh-bone was fractured at about the upper third, on the 16th of June. Mr. Trotter, surgeon, at Auchencairn attended the patient. I had spoken to him regarding the new mode of treatment, and he determined to follow the plan in the present instance. Another surgeon, from Kirkcudbright, was soon after also in attendance, and a difference of opinion on the proceeding arose in consequence. Mr. Trotter, however, having been first on the spot, carried his point, and took all responsibility on himself, whilst the other surgeon declared that the man's leg would be crooked and useless for life, if splints were not used. Cold lotions were applied, and the limb was placed in an easy position

in the pillows. The man suffered little or no pain. On the 14th day from the receipt of the injury he sat up, supporting his leg with his own hands, and had the bed properly made. On the 20th day he sat up for two or three hours, put the foot to the ground, and walked across the room with the assistance of a stilt; and in exactly one month from the occurrence of the accident, he walked six miles, and in a week thereafter he had walked to Castle Douglas, where I saw him. The leg was then as long and as straight as the other. This, then, is another case of a speedy consolidation, especially when we consider that the patient was a man well advanced in years. Those who are opposed to such a plan of treatment may say that *complete* union had not taken place; call it what they will, it is certain that consolidation, sufficient to enable my patient on the 14th day, and Mr. Trotter's on the 20th, to move the fractured limb, had taken place. Each day after, of course, strengthened the union; but when in my case I said 'that, on the 9th day the lower fracture appeared to have united,' and that on the 12th day 'both fractures were united,' I was certainly justified, as decidedly was Mr. Radley, in his 10th case, where he says, 'I believe the quickest union before recorded is one of 12 days in a child, but the present case exceeds it in rapidity; though as to the *degree* of union no one can speak.' The period which elapsed in this (Mr. R.'s) case 'was only ten days from the accident,' when the patient was able to be 'out for three or four hours.' (LANCET, p. 292. Vol. I. 1835-6.) And, again, in his 6th case, where he states that 'on the 19th day *union had taken place*, though not firmly.' His third case is, perhaps, as interesting a one as any on record. There we find, that from neglect to follow his salutary advice, all the evils of the tight bandaging and splintering system were about to set in; that when others might have taken away a quantity of blood to reduce the febrile excitement (and at the same time his strength), he reduced the former by merely gratefully cooling the fractured limb, whilst the strength of the patient was unimpaired. Mark what he states:—'*I never yet bled a patient with a fractured bone.*' This is said respecting 30 years' experience. Yet, in spite of much unfavourable interruption of the cure, we find the man walking up and down by a river's side, fishing, on exactly that day three weeks from the time of the accident. Well might Mr. Radley add, 'Believe it or not, who likes.' This is the best mode of treating those who remain sceptics, or who presume, under the cloak of fictitious names, to call in question the statements of those who would scorn the veriest approach to falsity."

OBSERVATIONS ON THE

ANCIENT DOCTRINE OF SOUL.

To the Editor of THE LANCET.

SIR:—Although not a phrenologist, yet acknowledging myself indebted to M. Broussais for the publication of his interesting lectures, I may possibly find excuse in remarking upon some of his statements, especially such as are not essentially necessary to the consideration for or against the theory of Gall, which, of course, must be judged by facts and not by dogmas.

The statements to which I allude are those concerning the ancient doctrine of mind and spirit, as given in THE LANCET of the 16th of July. M. Broussais sets out by asserting that Pythagoras taught the existence of three souls, a vegetative, a sensitive, and a rational; and that Democritus sustained the same opinion. Now this statement, I conceive, involves more than one contradiction; for, first, neither Pythagoras nor Democritus believed this comparatively modern doctrine; and, secondly, these over-celebrated philosophers entertained absolutely opposite notions of the nature of soul. The Pythagorean doctrine (see *Ov. Met.*, Lib. xv. Fab. 1) was, that animals having been made out of a fermenting mass of matter, by the Soul of the Universe, or Supreme Deity, (*numen supernum*) received a vivifying animal principle, or *psyche*, from the Eternal Soul: that this *psyche* constituted the souls of all living creatures, which were, consequently, in so far, eternal; that a period of union between an earthly body and this spiritual essence, constituted animal life; that when the earthly died, the soul, incapable of death, and yet destined solely for the sphere of earth, was, of necessity, compelled to take up its abode in some other animal body upon earth, and this fortuitously, brute or man. For as facile wax will yield to various impressions, and yet remain the same wax; so the never-dying soul is accommodated to the impressions or necessities of various bodies, and is yet for ever the same soul.

All this, in fact, is the doctrine of *metempsychosis*, a perversion of the Egyptian and Chaldean creeds; whereas Democritus, on the contrary, asserted that individual souls were the emanation of individual bodies, varying with their matter, and form of matter, brute with brute, fish with fish, man with man, &c.; that soul bore the same relation to matter as the perfume of a rose bears to the flower, or as light and heat bear to ignited fuel; so that as the smell of a rose lives by the bloom of matter, and fades with its decay, so the soul of an animal is born with its birth, and dies with its destruction. Thus it will be seen what opposite notions these philosophers entertained; in fact, they appear only to have agreed

in believing that a state of existence for man, beyond this earth, was, as Ovid writes it, "a prophet's, or a poet's dream, the priestcraft of a lying world."

"Quid styga, quid tenebras, quid nomina vana timetis?
Materiem vatum, falsique piacula mundi."

In thus alluding to the doctrine which both rejected, we may observe, that it was the most decidedly ancient opinion of spirit, or soul, stated in express terms, as may be gathered from the Iliad. Thus, the poem opens with the declaration of "the deep resentment of Achilles precipitating the valiant *spirits* of heroic men down to the place of darkness; but *themselves* (that is, their mortal frames) it made the dogs' and vultures' booty." And, again, in the 23rd book, Achilles having failed to embrace the ghost of Patroclus, which had just been reasoning with him, says,

"Ye powers! surely then in Pluto's house
There dwell a certain *spirit* and a *shade*,
But nought of *substance*"—(*phrenes*, the substantial organs of mind, on earth.)

Thus it is deducible, that the early Greeks believed man to be made up of three parts, a living spirit (or soul,) a spiritual body (or idol), and an earthly body (or investing frame), with its organs of mind.

Again, M. Broussais attributes to Plato the doctrine which placed the passions in the different viscera,—an anachronism of no small extent, for, full 600 years before Plato, David shows that the popular, and, consequently, the ancient, opinion of his day was, that not only the affections, but even the reasoning power, resided in the heart and kidneys, the latter being possibly considered, from very ancient time, the chief seat of vitality and passion; but the heart the seat of understanding, as seen by reference to the oldest of all authorities, the Book of Job. The liver is also spoken of as the fountain of life (Job 16, 13, and Iliad 1st, 598;) indeed, the very name, *hepar*, shows the anciently acknowledged importance of the organ, the name being derived *'epo ear*. "I eliminate the spring (of life), that is, the blood," whence the liver, up to the days of Harvey, was considered the laboratory of the blood. Again, the histories of all the great national forms of sacrifice and divination, Babylonian, Jewish, Grecian, and Roman, all show that the supposition of certain thoracic and abdominal viscera being the organs of affections, sentiments, and propensities, is a doctrine as ancient as it once was universal; and which, in fact, has become so venerable, from its antiquity, as to be embalmed, even now, in popular language, when its spirit, after various metempsychoses, has fled, never to return.

But whatever doubt may arise as to the express testimony of such considerations, we can have none from a passage of Anacreon, written full 100 years before Plato's day. A direct proof, then, that the liver was once considered to be the organ of *amativeness*, is this:—Cupid, one cold, wet night, having introduced himself as a poor little boy, who had lost his way, said he was afraid that the nerve of his bow was quite spoiled by the rain, and presently aiming at Anacreon he sent a dart like the sting of a gad-fly into his very liver (*mesonhepar*), and then chuckled at the prospect of the poet's cardiac pangs (*So de kardien ponesein*). Here, then, is a direct localization of the tender passion, and it is not a little remarkable (though, whether noticed by commentators I know not), that a no less eminent sensualist, who ought, by experience, to have learned the corporeal abode of love, describes the young wanton following an enticing woman "till a dart strike through his liver," (*Prov.* 7, 23,) which quotation, by the way, may be a fair set-off against Medea's cerebellar affection, quoted by Gall, and noticed by M. Broussais.

M. Broussais notices, also, amidst various others, the opinions of Aristotle and Galen. Whether Aristotle *originated* the idea of locating mental operations in the ventricles, or of making them what Locke calls "the mind's presence-room," I am not prepared to say; but it is certain that Ætius, who revived the doctrine in the sixth century, ascribed it to the Arabians, whose system of phrenology was, that imagination possessed the forehead, and memory the occiput (whence *os memoriæ*), while reason abided in the middle region of the brain; and this theory they upheld by very plausible arguments and cases, such as (in the words of an old English version), "the fore part of the head receiving a wound, the phansie is disturbed and impaired; and the hinder part of the head being hurt, proveth detrimental to the memory, &c." How high the controversy ran, as to whether the faculties resided in the investing membranes, as Ternelius contended, or in the whole substance of the brain, or in any one part of it, or in many parts, may be seen, at some length, in Diemerbrock's Anatomy (B. 3, ch. s. xxvi).

As to Galen, he asserts (not, as M. Broussais says, three, but) two kinds of spirits, animal and vital; the vital, he says, secreted from animal spirits, are poured by the arteries into the ventricles, and into the general substance of the brain. The two anterior and ventricles, he conceived, first prepared the animal spirits by inspiration, expiration, and efflation; the posterior ventricle receives the animal spirits by a notable passage, whose roof is called *kamarion*, or *psallocides*; and for the purpose of this respiration, the ethmoid bone was contrived as well as to purge the brain of its excrements. The construction of this bone, acting like a strainer to prevent the ingress of

cold air bursting into the ventricles, facilitates the ascent of vapours, and, on particular occasions, the descent of pituitary excrement! Galen, moreover, conceived that the soul was enthroned in the brain, and that man was originally created of dust; in support of which opinion he quotes Moses and Plato—(see *Galen on the use of parts* 8, 9, 11; *or, Mundelis Theâtrum Galeni.*)

Having prolonged these observations beyond the proposed limits, I shall make but one more remark on the subjects of the Lecture, and that is, that M. Broussais can scarcely expect the profession, on his bare assertion, to believe that Cuvier disapproved of Gall's theory in consequence of a tyrant's frown, and not in consequence of the reasons stated in the Report to the Institute on the Memoir of Gall and Spurzheim, especially as he afterwards maintained his published opinions, when M. Broussais's supposed cause of them was far, and for ever, removed. I am, Sir, your obedient servant,

R.

Lichfield, August 12th.

RESULT OF THE DEVICES OF MESSRS. SMITH AND BREE, AND THEIR COADJUTORS.

GENTLEMAN AND FARMER'S TWOPENNY MEDICAL CLUB.

To the Editor of THE LANCET.

SIR:—Enclosed is the Prospectus of a Medical Club which has been established in this neighbourhood. My principal object in sending it to you is to furnish, not a "supposed," but a real, fact, in answer to Mr. Bree's opinion that there is no danger of the system of Medical Clubs being extended to Farmers. You will, see, by the second paragraph in the handbill, that there is a special provision for Gentlemen and Yeomen being admitted to all the privileges of the Club, on paying an increased subscription.

The system of Medical Clubs has not been adopted in the Taunton Poor Law Union. I believe it was recommended by the Assistant Commissioner, but the Guardians were disposed, on the whole, to be more liberal to the Medical Officers than other Guardians have been in many other Unions, and the salaries fixed by the Board, though small, and inadequate as a remuneration for the labour required, are, at all events, not worse than the former system of payment.

The surgeon whose name appears in the Prospectus, is not one of the Union surgeons. He is, I believe, the only medical man who has any connection with the Club, of which, indeed, he is considered to have been the projector, although he only publicly appears as the Medical Attendant appointed by a Committee.

I send you this document without any comments of my own;—you may make what use of it you please. I have no wish that my name should appear, unless you think it desirable. You can withhold it or not, as you think proper.* I remain, sir, your obedient servant,

H. ALFORD, Surgeon to the Taunton and Somerset Hospital.

Taunton, Aug. 11, 1836.

"MEDICAL CLUB,

"CREECH ST. MICHAEL.

"It was determined at a MEETING, held at the BELL INN, CREECH St. MICHAEL, by the members whose names are annexed, to form themselves from henceforth into a regular Society, to pay their own Medical Attendant during any future illness, casualties, &c., (Midwifery excepted), at the rate of Six Shillings per annum, for each subscriber, which will include his family under his own roof, not arrived at the age of maturity, and that the same be paid by quarterly instalments of One Shilling and Sixpence; and any member neglecting to pay his quarterly subscription will be considered to have withdrawn himself from the Club, and not to be re-admitted until the arrears due be paid up; and that the funds are to commence with a quarter's pay in hand.

"It is understood that the above regulations strictly apply only to Mechanics, Labourers, and the Second Poor, independent of parochial relief; *but* GENTLEMEN, YEOMEN, AND OTHERS, *joining this society*, WHOSE MEANS MAY BE DEEMED ADEQUATE TO PAY AN EXTRA PRICE, *are to be admitted as* MEMBERS *accordingly*, WITH EVERY BENEFIT ARISING FROM THIS INSTITUTION, on condition of their so paying a further charge, which is to be arranged by the Medical Attendant and Committee, which shall be afterwards formed according to a just scale, taking the number of their families, servants, &c., into consideration.

"And we forthwith and hereby appoint Mr. James Dyer, Surgeon, &c., of Taunton, our Medical Attendant, and that his services are to commence forthwith, upon the payment of a quarter in hand. And should any complaint arise from any member as regards neglect, or non-attendance of that gentleman, that the aforesaid committee so appointed shall have a delegated power of inquiring into and regulating his future attendance.

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* As communications of this description always carry more weight when they are supported by the name of a respectable author, we deem it expedient to allow the name of Mr. ALFORD to remain attached to his letter.—ED. L.

"*Committee.*

"Rev. H. Creswell,	William Coles,
Samuel Ellis, Esq.	Charles Brass,
Mr. James Brewer,	William Brass,
Mr. B. P. Newton,	Mr. George Herne,
Mr. Thomas Burge,	Mrs. Eliz. Savidge,
William Stevens,	Thomas Stacy,
Thomas Stevens,	John Linton, (and

thirty-seven other persons whose names are not preceded by the title of 'Mr.'—ED. L.)

"N. B.—It is intended that this Club shall include the adjoining parishes, viz., West Monkton, Ruishton, Thorne Falcon, and Stoke St. Mary.

"Persons wishing to join this Society can do so by making application to Mr. Timothy Wyburn, Clerk, of Creech St. Michael.

"A Meeting will take place on Friday, August 5th, at the Bell Inn, Creech, at Six o'Clock in the Evening.

"July 28th, 1836.

"T. Trood, Printer, Auctioneer, &c., Taunton."

SURGEONS IN THE

MERCHANT SERVICE.

To the Editor of THE LANCET.

SIR:—Last year I took the liberty of calling your attention to the treatment of surgeons employed in the merchant service. Since that period, the custom alluded to has, I regret to say, gained ground, and is now fast becoming an established rule of proceeding.

Government, as well as the Honourable the East India Company, allow 15*s.* per head for the medical charge of troops to and from India, which sum (or at least the greater part of it) certain ship-owners are in the habit of transferring to their own pockets. On a former occasion, I only spoke of the matter generally; I now beg to call the attention of the public and the profession to a particular instance, which has very recently come under my notice, the giving publicity to which will, I feel assured, have more effect in putting down the fraud than a thousand general statements.

The "Java," a ship of 1400 tons burden, sailed a few days ago for India, with 300 troops on board. The greater part, if not the whole, of the allowances for the medical charge of this large body of men, instead of being applied to its avowed purpose, viz., the remuneration of the surgeon for the performance of his troublesome and responsible duties, was coolly transferred to the pockets of Messrs. Scott, Fairlie, and Co., the owners of the ship.

Now, Messrs. S., F., and Co. may turn round and say, "Most true it is that we have placed the surgeon's allowances to the credit of the ship; but we have done so by virtue of an agreement to that effect with the the surgeon himself." In plain terms, they have taken an unwarrantable advantage of, it may be, the infelicity of his circumstances, and made it a *sine qua non*, before appointing him to the ship, that he should come in to these most disgraceful terms. Now, it so happens that I am not acquainted with the surgeon of the Java. I am even ignorant of the gentleman's name; but I pledge myself to the accuracy of the fact, and I dare the parties named to deny it. This, Sir, is only one instance out of many that could be given. In point of fact, certain merchants, in making tenders for the transport of troops, regularly calculate on the surgeon's allowance, and are thus able to make tenders *exactly* 15*s. per head lower* than their brethren, who would scorn to enrich themselves by such means. I am, Sir, with sentiments of much regard, your obedient servant,

A YOUNG SURGEON.

London, July 13, 1836.

*** Our correspondent has confidentially authenticated his communication, adding, that he cannot be suspected of any interested motive in taking up this matter, as he has now left the mercantile service, in which he had been employed for several years. "The parties injured," he adds, very justly, "are a class of gentlemen who have a powerful claim upon the sympathies of their elder brethren. They are the junior members of the profession, engaged in encountering the struggles necessarily attendant on their first entrance into the real business of active life, and being too often in straightened circumstances, they are but too happy to yield to the hard terms of their employers, who are not slow to take this advantage of their unhappy situation."

COLCHESTER UNION.—*To the Editor.*—SIR: You seem surprised at the sum of 3*s.* per annum being paid by single persons at Stroud, for "Medical Attendance of every kind." If you look to the advertisement of the "Labourers' Sick Club" herewith sent, you will find that the surgeons in the Colchester Union have only 2*s.* a head for the same work. I understand that there are but very few names on the list of the "Labourers' Sick Club," most of the labourers here preferring to pay "their own doctor's bills in case of sickness." Your obedient servant,

ANTI-HUMBUG.

THE LANCET.

London, Saturday, August 20, 1836.

THE MEDICAL WITNESSES BILL, we rejoice to state, has at length become an Act of the Parliament of Great Britain and Ireland, and is *now*, having on Wednesday received the Royal Assent, one of the statutes of the realm, and, as such, it will afford a shield to medical men against that unjust and persecuting system of treatment, of which they have so long been made victims by non-medical coroners. The summoning constable will be no longer empowered by the head of the Inquest to summon a medical practitioner many miles from his home, make him waste his hours in waiting for a negligent officer, then call upon him to give unnecessary testimony, and ultimately bestow on him, in return for his demand to be remunerated for his labour and loss of time, either derision or rebuke. The Act, be it observed, is *now* in operation; and from the present moment, therefore, we have just grounds for stating, that medical practitioners will no longer be made objects of persecution and sport in the coroner's court. From time immemorial it has been the custom to summon, at every inquest, some medical practitioner, without sufficient attention being at first bestowed on the facts or circumstances which may have produced the death of the deceased person. Between the consequences of falling from a house-top, or into a quarry, the explosion of coal-damp, or of gun-powder, the crushing of the body, or cutting it in twain by the wheel of a waggon or the machinery of a steam-engine,—between these events and cases of poison which are involved in mystery, no distinction whatever was made. In *all* such cases, a medical man, through the pernicious activity of the busy constable, or from the carelessness, the absence of judgment, or the spitefulness of the coroner, was, to his great inconvenience and loss of time, dragged before the "Crowner's 'quest." In future, the medical practitioner will scarcely ever be summoned unless he is really wanted. This is a point which medical practitioners should themselves explain to the persons who will henceforth have to pay the fees. In all cases which involve doubtful causes of death, the parishes and the counties are put to useless expense, and juries and witnesses are caused unnecessary trouble, unless efficient medical testimony be adduced. In fact, the whole proceeding must partake more of the character of a serio-comic farce than of a well-conducted judicial ceremony, unless medical practitioners attend and instruct the coroner and jury regarding circumstances of which they were, previously, totally ignorant. The operation, therefore, of the present law will be, to secure the attendance of competent medical witnesses, when the testimony of such persons is absolutely requisite, and to secure to those witnesses, in all cases, some remuneration—however inadequate, in very many instances, it may be—for that attendance.

The disposition did not exist in the Legislature to make a full pecuniary award for the tedious analyses which post-mortem examinations sometimes entail on the medical witness. If, however, the fees which are to be obtained under this Act be inadequate on some occasions, it should be recollected that the new law will protect medical practitioners from the unnecessary attendances to which they have hitherto been subjected. The summonses for medical witnesses will not henceforth be wantonly and tauntingly issued.

The new Act, it should be observed, leaves all other matters connected with the coroner's court untouched. It is not a law, as many have supposed, for regulating the general proceedings at inquests, but one which affects the coroner only, in relation to the duties of the medical witnesses, and concerns, as witnesses, only members of the medical profession.

The alterations which have been made in the measure since it was printed in THE LANCET of June 18, 1836, are few in number,

and quite unimportant, excepting as regards the substitution, in clause 2, of the words "the greater number of jurymen," for the words "any six of the jurymen." This alteration is a decided improvement, the words "majority of the jurymen" having been objected to in the House of Commons; but Lord WHARNCLIFFE, who kindly undertook the charge of the Bill in the House of Lords, caused them to be introduced while the measure was in the latter assembly. On the return of the Bill to the Commons, no opposition was offered either to that or to another amendment or two of the Lords, each being adopted *nem. con.*

Several of the medical officers of our public hospitals have complained of the construction and tendency of clause 5. They cannot understand why the physician or surgeon of a public hospital, whose duty it may be to attend a patient in such an institution, should be precluded from receiving a fee when summoned to give evidence at an inquest held on the body of the deceased person. So far as the present generation of medical officers in our public institutions is concerned, this law might almost be said to inflict upon them a just punishment for their past neglect. When these persons are required to give evidence before coroners at inquests held in hospitals, it is well known that they throw off that duty upon the office-buying dressers, upon their house-pupils, or upon other equally incompetent parties; and the race of non-medical coroners are upon such good terms with the treasurers, the house committees, and the medical officers of those establishments, that they continue to slur over this part of their duty, allowing the jury to rest satisfied with the evidence of incompetent persons, having first of all left the beadle to summon whomsoever he may think fit, the coroner himself partaking, as the reward for his supineness, of the good cheer which is to be found at the quarterly and annual grand dinners of the institution. In a "Coroner's Bill," this is one of the numerous evils which should be obviated. The evidence which is generally given at the inquests held in our hospitals, is a disgrace not only to the system of management adopted therein, but to the medical jurisprudence of the country.

However, the exclusion of the medical officers of our public medical institutions, from the *remunerative* operation of the new law, so far as an attendance is enjoined at inquests on the bodies of patients whom they have treated in those institutions, must not be regarded in the light of a punishment. The framer of the clause had no such unworthy object in view. Far different motives existed for the introduction of this essential prohibition. The source of the difficulty which had to be overcome by this clause, related to the fund out of which the payments were to be made. When leave was obtained, in March last, to introduce the Bill, it was proposed by the mover that the fees should be received out of the county rate. The proposition was warmly opposed by two of the members for Kent, and other members who sat on their side of the house. On finding that this opposition would not be withdrawn, and that the parties offering it might, by availing themselves of technical forms, successfully resist the progress of the Bill, the Parish Fund was substituted for that of the County, and it was directed that the coroner should add his order for payment to *overseers*, instead of to the treasurer of the county. Hence arose a new state of things, with reference to the medical officers of our hospitals and other public medical institutions, which precluded the possibility of placing those gentlemen, in their presence at inquests on the bodies of persons whom they had treated officially in those establishments, on a footing with practitioners in their attendance at inquests held on the bodies of private patients. The rate-payers of parishes cannot object to bear their share of all ordinary burdens and cares which are incident to the due administration of justice in their respective districts; but a parish having within it a large hospital which receives sick persons

from twenty surrounding parishes, might reasonably object to incur the expense which would necessarily arise from the attendance of the medical witnesses of such a hospital, at inquests held on the bodies of persons who were in no respect connected with the parish in which the hospital was situated. In the *London Hospital*, for instance, a great number of inquests are held, numerous subjects of accidents being taken to that institution from the East and West India Docks, and other distant places. What would be the cost to the parish of Whitechapel, the site of the hospital, if the medical officers whose duty it might be to attend the patients were to receive a fee for attendance in every instance which might occur in their particular locality? But it may be said, "Why "should such payments operate more un-"justly than do those which are made to "the coroner?" We answer, that it is a mistake to suppose that that officer is paid by the overseers. He obtains his fees from the treasurer of the county. Hence, *cæteris paribus*, the parish which contains in it a large hospital, pays no more towards the expenses of the coroner's court, than do the other parishes by which it is surrounded. The two sources, then, whence the fees are drawn, and the peculiarity which attends parishes containing public medical institutions, where the deaths of non-parishioners frequently happen, rendered it absolutely necessary towards the success of the measure, and the just operation of the law, that clause 5 should be framed as it now stands in the Act. If such difficulties as it was sought to overcome by this section could not be removed by some nearly unobjectionable provisions, it would be impossible to succeed in passing any measure which involved the recognition of a strictly new practice, into a law. Although, for example, leave was given to bring in this Bill in the first week of March, it was not possible to convert it into an Act of the Legislature,—to convert it into a law,—until the middle of August, in the last week of the session. Almost innumerable are the times which it has been entered amongst the "Orders of the Day" for its various "readings," "committees," and reports;" and tedious and perplexing have been the occasions on which each succeeding stage has been postponed. Without the most *constant* and *vigilant* watching, the Bill could not have become a law in the present session of Parliament, and without attention to the little objections, not *unfriendly* ones, which were ever springing up around,—not to the principle of the Bill, but to the particular details,—it could not have been carried in Parliament, either in the present or in any future session. The difficulties of such an undertaking may be best understood by the fact, that there are now many Bills in the House which were introduced at the commencement of the session of 1835,—such as the "Public Institutions "Bill," the "Inns and Alehouses Bill," the "Prisoner's Counsel Bill," and fifty others, which have not advanced a single stage in the present session beyond the one which they had attained in the last. Throughout the entire session, some of those Bills have not made the slightest advance beyond their first step; and not once have their promoters, with their most earnest and unremitting attention, been able to conquer the difficulties with which they have been surrounded.

The Council of "The University of London, after a pause, which must have acted as instructive and admonitory to the Professors, have adopted the recommendation of the Medical Faculty and the Senate, and have succeeded in jamming Dr. Sharpey of Edinburgh, into the same chair with Mr. R. Quain. We are deceived if the seat will long sustain the pressure. The election has been an unwise proceeding throughout, and the consequences will not be gratifying to the friends of the institution.

We understand that many of the Council declare that it was owing to the first false step in advertising the Chair of Anatomy as vacant,—by which announcement one class

of candidates was incited to come forward, and another class induced to hold back,—that two Chairs, one of Anatomy and one of Physiology, have not been established on this occasion, and that Mr. R. QUAIN has not been appointed to the former, and Professor GRANT to the latter. Well, be it so. Other false steps will be taken if the candidates are to pass through that road to preferment which is to be selected by the Professors.

But the MENTAL TRIAL,—the system of CONCOURS—of COMPETITION,—is that mode of election to be prohibited and repudiated by the new institution? Aye, thus far, the Professors, and their instruments in the Council, may have succeeded in their endeavour to keep down the rising genius—the youthful mind—of England. If we mistake not, however, their success will ere long be restricted *to the confines of one establishment*. In the next LANCET we shall make an appeal to the medical practitioners of Great Britain and Ireland on this subject. The odious and accursed system of self-election, whether it exist in an old or in a new institution—whether it be supported by foes or by friends—shall receive no support in the columns of this journal. There are some leading men of wealth, great political intelligence, and high public spirit, who are prepared to lend their aid to the members of the medical profession, towards founding a system in which genius and acquirements shall receive their fair reward, and whose disgust at what has recently transpired in "The University of London," induces them to declare that nothing but folly, envy, or intrigue, could have deprived the students of the services of Professor GRANT in the Chair of Physiology. Sincerely do we hope that our predictions respecting the recent election may not be fulfilled. Our admonitions have been offered in no unfriendly spirit to the University. On the contrary, ardently do we desire that it may thrive and prosper; but it is time that the Council should know, that as they think proper to sanction a system of *self-election*,—that as they have rejected a plan of *competition* in their internal arrangements, in filling the medical chairs of the establishment, a system of *external* competition must be brought into effectual operation, in order to obviate the effects of perpetuating a monopoly which is as disgraceful to the scientific character of this nation, as it is subversive of the rights of superior intellect.

AFTER what has appeared in the pages of THE LANCET relative to the self-supporting dispensary humbugs, medical clubs, and the projects of the Mr. BREES and the Mr. DEVICES of Stowmarket, the account of the scheme which has been set in motion at Creech St. Michael, in Taunton, Somerset, kindly and promptly communicated to the profession by Mr. ALFORD of the *Taunton and Somerset Hospital*, will be read probably with feelings partaking more of pain than astonishment. Without knowing it, Mr. BREE was a Mr. DEVICE, in a small way; and when that gentleman declared that he had not yet seen any practitioner of such a description at Stowmarket, he was disclaiming, in point of fact, his own brotherhood in practice, his own kindred in intention and contrivance. Without the intervention of the legislature, we fear that great pecuniary suffering, if not ruin, will quickly overtake the medical practitioners of this country.

Mr. MAYO, by offering himself for the vacant chair in "The University of London," does not appear to be more anxious to quit the temple of bigotry in the Strand, than are his colleagues desirous that his feelings in that respect should be promptly gratified. It appears that those gentlemen have written to their migratory professor, affectionately requesting, as he is uncomfortable in his present position, that he will take his departure from the "*concern*."

Nota bene. It is stated that Dr. EADY is in want of a demonstrator.

A CORRESPONDENT asks "whether the "council of the College of Surgeons can "take cognizance of a complaint made to "them by Mr. HOWSHIP, that Mr. PETTI-"GREW took from him five hundred guineas "for an appointment to the office of surgeon "to the *Charing Cross Hospital*, the repre-"sentations which accompanied the sale "being such as experience affords Mr. "HOWSHIP reason to think he will not "realise. Mr. PETTIGREW is a member of "the college, and Mr. HOWSHIP a member "of the council."

In reply to the question we can only observe, that the council certainly might take *cognizance* of such a disgraceful transaction, if it had really been perpetrated, but that body has no power whatever to punish either the seller or the buyer of the office. The medical profession of England has, in fact, no controlling head.

AN ACT

TO PROVIDE FOR THE

ATTENDANCE AND REMUNERATION

OF

MEDICAL WITNESSES AT CORONERS' INQUESTS.

[Aug. 18th, 1836.]

Summoning of Medical Witnesses.

I. WHEREAS it is expedient to provide for the attendance of Medical Witnesses at Coroners' Inquests, also Remuneration for such attendance, and for the performance of Post-mortem Examinations at such Inquests: Be it therefore enacted by the King's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, that from and after the passing of this Act, whenever upon the summoning or holding of any coroner's inquest it shall appear to the coroner that the deceased person was attended at his death, or during his last illness, by any legally qualified medical practitioner, it shall be lawful for the coroner to issue his order, in the form marked (A) in the Schedule hereunto annexed, for the attendance of such practitioner as a witness at such inquest; and if it shall appear to the coroner that the deceased person was not attended at or immediately before his death by any legally qualified medical practitioner, it shall be lawful for the coroner to issue such order for the attendance of any legally qualified medical practitioner, being at the time in actual practice in or near the place where the death has happened; and it shall be lawful for the coroner, either in his order for the attendance of the medical witness, or at any time between the issuing of such order and the termination of the inquest, to direct the performance of a post-mortem examination, with or without an analysis of the contents of the stomach or intestines, by the medical witness or witnesses who may be summoned to attend at any inquest; provided that if any person shall state upon oath before the coroner that in his or her belief the death of the deceased individual was caused partly or entirely by the improper or negligent treatment of any medical practitioner or other person, such medical practitioner or other person shall not be allowed to perform or assist at the post-mortem examination of the deceased.

Additional Medical Evidence if the first be not satisfactory.

II. And be it further enacted, That whenever it shall appear to the greater number of the jurymen sitting at any coroner's inquest, that the cause of death has not been satisfactorily explained by the evidence of the medical practitioner or other witness or witnesses who may be examined in the first instance, such greater number of the jurymen are hereby authorized and empowered to name to the coroner, in writing, any other legally qualified medical practitioner or practitioners, and to require the coroner to issue his order, in the form herein-before mentioned, for the attendance of such last-mentioned medical practitioner or practitioners as a witness or witnesses, and for the performance of a post-mortem examination, with or without an analysis of the contents of the stomach or intestines, whether such an examination has been performed before or not; and if the coroner, having been thereunto required, shall refuse to issue such order, he shall be deemed guilty of a misdemeanor, and shall be punishable in like manner as if the same were a misdemeanor at common law.

Fees to Medical Witnesses and Funds for their Payment.

III. And be it further enacted, That when any legally qualified medical practitioner has attended upon any coroner's inquest in obedience to any such order as aforesaid of the coroner, the said practitioner shall for such attendance at any inquest in Great Britain be entitled to receive such remuneration or fee as is mentioned in the table marked (B.) in the Schedule hereunto annexed; and for any inquest held in Ireland, the said practitioner shall be paid in the manner provided by the laws in force in that part of the United Kingdom; and the coroner is hereby required and com-

manded to make, according to the form marked (C.) in the Schedule hereunto annexed, his order for the payment of such remuneration or fee, when the inquest shall be held in Great Britain, and such order may be addressed and directed to the churchwardens and overseers of the parish or place in which the death has happened; and such churchwardens and overseers, or any one of them, is and are hereby required and commanded to pay the sum of money mentioned in such order of the coroner to the medical witness therein mentioned, out of the funds collected for the relief of the poor of the said place.

Fee not payable for a post-mortem Examination instituted without Order from the Coroner.

IV. Provided nevertheless, and be it further enacted, That no order of payment shall be given, or fee or remuneration paid, to any medical practitioner for the performance of any post-mortem examination which may be instituted without the previous direction of the coroner.

Inquests on Bodies of Persons dying in public Institutions.

V. Provided also, and be it further enacted, That when any inquest shall be holden on the body of any person who has died in any public hospital or infirmary, or in any building or place belonging thereto, or used for the reception of the patients thereof, or who has died in any county or other lunatic asylum, or in any public infirmary or other public medical institution, whether the same be supported by endowments or by voluntary subscriptions, then and in such case nothing herein contained shall be construed to entitle the medical officer whose duty it may have been to attend the deceased person as a medical officer of such institution as aforesaid to the fees or remuneration herein provided.

Penalty for neglecting to attend.

VI. And be it further enacted, That where any order for the attendance of any medical practitioner as aforesaid shall have been personally served upon such practitioner, or where any such order not personally served shall have been received by any medical practitioner in sufficient time for him to have obeyed such order, or where any such order has been served at the residence of any medical practitioner; and in every case where any medical practitioner has not obeyed such order, he shall for such neglect or disobedience forfeit the sum of five pounds sterling, upon complaint thereof made by the coroner or any two of the jury before any two justices having jurisdiction in the parish or place where the inquest under which the order issued was held, or in the parish where such medical practitioner resides; and such two justices are hereby required, upon such complaint, to proceed to the hearing and adjudication of such complaint, and if such medical practitioner shall not show to the said justices a good and sufficient cause for not having obeyed such order, to enforce the said penalty by distress and sale of the offender's goods, as they are empowered to proceed by an act of parliament for any other penalty or forfeiture.

Act not to extend to Scotland.

VII. And be it enacted, That nothing in this act contained shall extend to Scotland.

SCHEDULE TO WHICH THIS ACT REFERS.

(A.) *Form of Summons.*

Coroner's inquest at , upon the body of

By virtue of this, my order, as coroner for , you are required to appear before me and the Jury at , on the day of 18 , at o'Clock, to give evidence touching the cause of death of , [*and then add, when the witness is required to make or assist at a post-mortem examination*, and make or assist in making a post-mortem examination of the body, with [*or* without] an analysis, [*as the case may be*,] and report thereon at the said inquest.

(Signed) Coroner.

To , Surgeon, [*or* M.D., *as the case may be*.]

(B.) *Table of Fees.*

1. To every legally qualified medical practitioner for attending to give evidence under the provisions of this act, at any coroner's inquest, whereat no post-mortem examination has been made by such practitioner, the fee or remuneration shall be one guinea.
2. For the making of a post-mortem examination of the body of the deceased, either with or without an analysis of the contents of the stomach or intestines, and for attending to give evidence thereon, the fee or remuneration shall be two guineas.

(C.) *Coroner's Order for the payment of Medical Witnesses.*

By virtue of an act of parliament passed in session of holden in the intituled I, the coroner of or for , do order you, the overseers of the parish [*or* township, *as the case may be*], to pay to the sum of [one guinea, *or* two guineas, *as the case may be*], being the fee [*or* fees] due to him for having attended as a medical witness at an inquest holden before me this day of , upon the body of , about the age of , who was found dead at , [*or other particulars or description*], and at which said inquest the jury returned a verdict of .

(Signed) Coroner.

Witnessed by me of .

To the Overseers, &c. &c.

NORTH LONDON HOSPITAL.

SEVERE PERITONITIS.

JOHN BARNES was admitted July 21st, 1836, under the care of Dr. ELLIOTSON. He has been an out-patient under the care of Dr. CARSWELL, for the last fortnight, having suffered under the symptoms of icterus, which came on suddenly, with great pain, in the right hypochondrium, relieved by pressure, and occurring in paroxysms. He has had occasional pain and tenderness of the abdomen ever since. Yesterday, while at work, he was seized with violent pain, round the umbilicus chiefly, but also extending round to the loins. During the night he vomited slightly. He has at present great pain at the right hypochondrium, and over the whole of the abdomen, and he cannot bear the least pressure from the bed-clothes. Bowels have been regular, there is little preternatural heat, great thirst, tongue covered with a thick and glassy yellowish-white mucus. State of the pulse not taken before he was bled. Mr. TAYLOR ordered venesection to vj., but merely prescribed an anodyne, as it was visiting day. Dr. ELLIOTSON saw him in the afternoon, and as the pain was not relieved by the bleeding, nor was syncope induced, he ordered him to be bled until fainting should occur. Twenty-six ounces of blood were taken, and five grains of calomel were ordered to be given every second hour. Pulse after the bleeding 96, and soft. To have nothing but toast-water.

July 22. Can bear pretty firm pressure without pain; less thirst; tongue cleaner at the point and edges. The pain in the abdomen was removed yesterday, the moment syncope was induced, but it returned afterwards. The pills were omitted to-day at noon, ptyalism being produced. Blood cupped and buffed.

23. Quite free from pain. To have barley-water to drink. He went on improving, up to the 1st of August, when, being quite convalescent, he was discharged at his own request.

OPERATION FOR CARCINOMA OF THE LIP.

John Gnesin, aged 67, was admitted July 24, under the care of Mr. LISTON. Two years ago he perceived a hard tumour on the lower lip, in the situation where his tobacco-pipe habitually rested. This has gradually increased in size, and now occupies nearly the whole breadth of the lower lip. The surface is irregular, and the lip is everted, and double its usual thickness. Shortly after his arrival, Mr. LISTON removed the tumour in the operating theatre. He passed a bistoury through the part, below the centre of the tumour, and cut, in a circular direction, outwards, and then, by a similar incision on the opposite side, removed the diseased part. The great breadth of the disease rendered it impossible to cut out the part in the shape of the letter V, and to unite the opposite surfaces, so that the wound was left to heal by granulation; water dressing ordered.

July 29. Wound looking well, and beginning to suppurate. Can retain the saliva.

August 9. Is quite well. Excepting by close examination, it could not be ascertained that any disease had existed, or any operation been performed.

In making some remarks on this case, Mr. LISTON observed, that the long-continued use of a short pipe was often the cause of this disease, as was also the sharp corner of a tooth, or any other continued source of irritation at that part. Ulcers on the lips were not favourably situated for healing, the continued moisture and motion of the parts, and the continuance of the cause, rendering them exceedingly liable to degenerate. All ulcers of the lips were not, however, malignant; many of them might be healed by simple means—the abstraction of the exciting cause—keeping the parts at rest by means of a bandage—and the employment of such dressings as the character of the sore indicated. Carcinomatous sores must be early attacked; applications of the chloride of lime, and other escharotics, could not be trusted to; the knife was the only thing to be depended upon. When only one-third of the lip was involved in the disease, and the hardness did not extend beyond that, incisions might be made in such a way that the parts would heal by the first intention, and the features were improved rather than deformed by the operation. The parts cut away resembled the letter V, the angle being towards the chin. In the present case, as the disease occupied a large portion of the lip, he could not operate in this way, but he cut out the diseased mass, wide of the surrounding hardness, leaving the space to be filled with granulations. The part was to be kept steady, and the suppurative process encouraged by proper applications. By watching this case, the pupils would observe that a cure would result without inconvenience or deformity.

HÆMORRHAGIA.—EFFECTS OF THE SECALE CORNUTUM.

Margaret B———, aged 42, was admitted July 22, under the care of Dr. ELLIOTSON. She is married, and has had sixteen children. Always enjoyed good health until about 18 months since, when she had hysterics, following a severe labour, from which she has never perfectly recovered. For seven months past she has been subject to hæmorrhage from the vagina. The first attack occurred about that time, commencing with menstruation, which occurred naturally for the first week; after this a watery fluid continued to be discharged at intervals, once or twice a-day, in gushes, perhaps half a pint, and this was followed by fleshy masses of a dark co-

lour, having much the appearance of liver, the discharge of which was attended with pains like those occurring after delivery. This discharge of limpid fluid and clots has recurred at each menstrual period since, and usually continues about a fortnight, or rather more. She is now in a state of anemia. The face and skin generally are pale, the scelortic coat very white, and the tongue quite pale. She feels very weak, and complains very much of a feeling of soreness and oppression of the chest, but there is no external tenderness, and she can take a full inspiration. There is a sensation of sinking at the epigastrium, also dyspnœa on exertion. Palpitation excited by slight causes; subject to hysteria; bowels regular; pulse 96, and rather jerking; a rough preternatural sound heard with the systole of the heart, to the left of the central third of the sternum. Nothing morbid discovered on examination per vaginam.

July 23. A scruple of the secale cornutum was ordered to be given every four hours, and a scruple of the tincture of the muriate of iron three times a day, with a view of relieving the anemia.

25. The discharge, which returned yesterday, was checked by the administration of two powders.

26. A little discharge this morning, after a fit of coughing; there was no discharge yesterday; the secale to be diminished to fifteen-grain doses, as it produces sickness; the iron to be increased to half-drachm doses.

August 9. No discharge since last report; in every way relieved; discharged to-day, with medicine for a fortnight.

JAUNDICE.—VOMITING.—EFFECTS OF CREOSOTE.

Phillis Moseley, aged 60, was admitted July 23rd, under the care of Dr. ELLIOTSON. Has been unwell for four months past; her illness commenced with sickness, vomiting, and a constant pricking sensation of the whole surface of the body. She has had no medical advice. These symptoms continued at intervals, and about two months ago she first noticed yellowness of the eyes, and, soon after, of the whole surface of the body. The appearance of the jaundice was not preceded by any other symptoms than those which had existed for some time previous; viz., vomiting, and the tingling sensation. From her own statement, she appears not to have had any symptoms of hepatitis at this time.

On the 14th instant she came under the care of Dr. CARSWELL, who gave her two grains of calomel, and three of compound powder of ipecacuanha every night, and 3ij of castor oil every morning; and ordered a blister to the epigastrium, to be dressed with savine ointment. She has received much benefit from this plan of treatment, the yellowness of the eye, &c., having been much decreased. Her gums are a little tender from the mercury; there is some tenderness of the right hypochondrium; she has had frequent rigors for a fortnight past. Bowels regular. Before she came to Dr. CARSWELL, her motions were clay-coloured, their colour is now more natural. Tongue a little furred and dry. Thirst; pulse moderate. Urine high-coloured. Face yellow, and the superficial vessels enlarged and reticulated, as they are usually seen in organic abdominal disease.

July 24. Cupped in the right side to ten ounces—low diet.

26. The pain in the side relieved, there is now no tenderness of the hypochondrium, or epigastrium. Extremities cold. The sickness and vomiting continue at intervals, in the manner in which they commenced four months ago, without any abatement of their severity. One minim of creosote was ordered every two hours, and ten grains of the compound extract of colocynth every night.

29. There was no sickness after the *first* dose of the creosote. Skin warm and moist.

30. Still better, jaundice decreasing. Omit the creosote.

August 6. There has been no sickness or vomiting since the creosote, and she was so well on the 9th as to be discharged cured.

Dr. ELLIOTSON in lecturing on this case, pointed particularly to the fact of the long continued vomiting being at once relieved by the creosote. Many persons had denied the efficacy of this medicine in cases of vomiting; but he considered that the cases in which those persons had employed the medicine were not proper ones—that inflammatory condition of the stomach was present—or that they had not given the medicine long enough, for in some cases it was necessary to give large doses, and continue them for some time. It had been said that creosote did not act better in these cases than other remedies for vomiting, such as hydrocyanic acid, &c., but his experience gave creosote the preference, the case above was one of the most striking instances of it, however, he had ever met with, the long continuance of the symptoms being its chief peculiarity.

GOUT.—A patient was lately in the hospital, 59 years of age, a painter and glazier, of temperate habits, who, 25 years since, had an attack of gout, and had never experienced another until the present, which came on a fortnight since, and is now subsiding. His father was subject to gout. As there was merely weakness, Dr. ELLIOTSON ordered him a tonic, and in a few days he became well. Dr. ELLIOTSON mentioned that he had met with a case in which gout had attacked a gentleman when 30 years of age, and though he lived to the age of 77, he had no recurrence of the complaint.

EXTRACTION OF A LIVE CHILD,

BY THE OPERATION OF TURNING,

AFTER THE MOTHER'S DEATH.

Mrs. H., 41 years of age, was frequently subject to accidents depending on plethora. Her first seven children were born without any accident: pregnant, for the eighth time, in 1832; she lost the fœtus by abortion. Towards the fourth month of her ninth pregnancy symptoms of congestion towards the head set in, and on the eighth month she began to complain of pain about the sacrum, with loss of motion in the right lower extremity. These accidents were soon joined by pain in the head and vertigo, which were a little relieved by general bleeding. On the 25th of April, 1834, at mid-day, the first pains set in, and the membranes gave way at about 10 o'clock in the evening; the mobility now immediately became modified, and evidently weaker; the patient complained of excessive pressure about the forehead, anxiety, and oppression. These accidents were worse on the following day; the face assumed a dark red colour. On the 26th, at mid-day, the patient barely answered any questions put to her, saying merely yes, when asked if she felt any pain, and pointing to the head. The pulse was now full and hard; venesection was had recourse to, and 16 ounces of blood extracted at 6 o'clock in the evening. Convulsive motions of the muscles of the face and extremities, however, soon appeared, and in a quarter of an hour after the bleeding the woman expired. A physician called in on the spot, found the head of the child presenting, but too high up in the pelvis for the application of the forceps. He immediately introduced his hand into the uterus, and, in a quarter of an hour after the mother's death, and twenty hours after the rupture of the membranes, extracted a male infant, in an apparent state of death. The ordinary means were sufficient to excite the circulation in about five minutes, and the child, which was full-grown and well-formed, has since continued well.—*Berlin Med. Zeit.*, July 6th, No. 27.

TO CORRESPONDENTS.

R., Argus, and *Croton Tiglium*, next week.

Mr. Smethurst.—We cannot promise to insert the description until we have had the opportunity of reading it. The "claim" would certainly in no way be prejudiced by the publication.

It would be useless to mention the facts stated by Mr. *Evans* of Carmarthen, excepting as grounds for proceeding in a court of law, where, we presume, none of the cases are likely to appear.

CAUTION TO MEDICAL MEN.—A correspondent informs us "that a new and specious system of swindling, of which medical men are the subjects, has lately been put in practice around London. A man in the garb of a gentleman," he says, "called at my surgery, some few miles west of London, about three weeks since, apparently in anxious haste, to borrow a large-sized catheter, to relieve a patient who was suffering under retention of urine. So plausible was his manner, and so professional his style, that I at once, and unsuspectingly, offered him my case, from which he selected the largest instrument, and carried it off, never to return. I have since discovered that the same person made many calls on the same day on my professional neighbours, many of whom contributed to his stock of catheters."

IN the charter which is about to be granted for constituting an university in this metropolis, the new seat of learning will be denominated "The University of London," and the parent institution in Gower Street will be called "University College."

Crito.—King's College will retain its name, and each new chartered school or association of professors, will, as it arises, doubtless take rank and title as a "College." A metropolis of such wealth and spirit, cannot fail in the course of a few years to be enriched with many noble collegiate institutions devoted to the cultivation of letters and science. The error which was committed when the "University of London" was first christened, must now be palpable to those who have pertinaciously persisted, in spite of warning and remonstrance, up to this moment, in defending the name selected at its foundation. The second baptism was ever obvious in perspective.

A Young Student.—Our replies to the questions are as follows:—1st, It is not probable that the circulation is totally suspended in any of the arteries of a patient labouring under cholera, otherwise the consequences mentioned by our correspondent would unavoidably take place. 2nd, The absence of pulsation is easily explained, on the supposition that a much smaller quantity of blood than the normal passes through the vessel. Pulsation is an effect of elasticity in a tube which is momentarily over-distended, and not an active quality, as many physiologists of this country still suppose.

Dr. JONES QUAIN has been appointed an examiner in the New Metropolitan University.

Mr. J. BENNENT, 81, Rue de la Harpe, is informed that the Society of Apothecaries will receive French certificates, if duly authenticated by the Faculty of Medicine. The Royal College of Surgeons have never arrived at this degree of liberality, but a diploma, just as reputable, may be obtained from any of the Scotch surgical colleges, which admit certificates from France.